

Service Manual

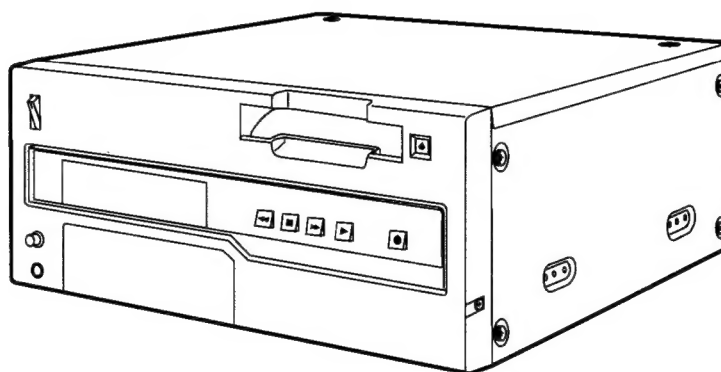
Vol. 1



- Sec. 1** *Operating Instructions*
- Sec. 2** *Service Information*
- Sec. 3** *Maintenance & Mechanism Adjustments*
- Sec. 4** *Electrical Adjustments*
- Sec. 5** *Exploded Views & Replacement Parts Lists*

Digital Video Cassette Player
AJ-D440P/E

Digital Video Cassette Recorder
AJ-D450P/E



Please refer to the Service Manual Volume 2 (order No. VSD9907M904B) for Block Diagrams, Schematic Diagrams and Circuit Board Diagrams.

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⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public. It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product. Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products deal with in this service manual by anyone else could result in serious injury or death.

INTRODUCTION

This service manual contains technical information which will allow service personnel to understand and service the DVCPRO Studio VTR AJ-D440P/E and AJ-D450P/E.

If the part or circuit is changed or modified, this information will be followed by supplementary service manual to be filed with original manual.

Vol. 1

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Specifications

AJ-D440_P AJ-D450_P

GENERAL

Power supply:	AC 120 V, 50 – 60 Hz
Power consumption:	AJ-D440; 120 W AJ-D450; 150 W

Operating ambient temperature:	41°F to 104°F (5°C to 40°C)
Operating ambient humidity:	10% to 90% (no condensation)
Weight:	AJ-D440; 33 lbs (15 kg) AJ-D450; 34.98 lbs (15.9 kg)
Dimensions (W × H × D):	16-3/4 × 6-15/16 × 16-3/8 inches (424 × 175 × 415 mm)
Recording format:	DVCPRO format
Recording tracks:	Digital video Recorded in sub-code area Time code; 2 channels Digital audio; 1 track Cue Track; 1 track Control (CTL);
Tape speed:	33.820 mm/sec
Recording time:	184 minutes (with AJ-5P92LP) 66 minutes (with AJ-P66MP)
Tape:	1/4-inch thin magnetic layer metal tape
FF/REW time:	Less than 3 min (with AJ-5P92LP) Less than 2 min (with AJ-P66MP)
Editing accuracy*:	±0 frame (using time code)
Tape timer accuracy:	±1 frame (using continuous CTL signal)
Servo lock time:	Less than 0.5 sec. (color framing/ standby ON)

VIDEO

(Digital video)

Sampling frequencies:	Y; 13.5 MHz/P _B , P _R ; 3.375 MHz
Quantizing:	8 bits
Error correction:	Reed-Solomon product code

(Digital IN/analog component OUT)

Video bandwidth:	Y; 30 Hz to 5.5 MHz (±1.0 dB) P _B , P _R ; 30 Hz to 1.0 MHz (±1.0 dB)
S/N ratio:	Better than 56 dB
K factor:	Less than 2%

(Analog component IN/component OUT)

Video bandwidth:	Y; 30 Hz to 5.5 MHz (–1.5 dB to +1.0 dB) P _B , P _R ; 30 Hz to 1.0 MHz (–2.0 dB to +1.0 dB)
S/N ratio:	Better than 55 dB
K factor:	Less than 2%

(Analog composite IN/composite OUT)

Video bandwidth:	Y; 30 Hz to 4.5 MHz (–1.5 dB to +1.0 dB)
DG:	Less than 4%
DP:	Less than 31°
Y/C delay:	Better than 20 ns
K factor:	Less than 3%
S/N ratio:	Better than 48 dB

(Video input connector)*

Analog component input*:	BNC×3 (Y, P _B , P _R) Y; 1.0 Vp-p, 75Ω P _B , P _R ; 0.486/0.7 Vp-p switchable, 75Ω (75% color bar, 7.5% setup)
Analog composite input*:	BNC×2, loop-through, 75Ω on/off
S VIDEO input*:	S terminal (4-pin)×1 Y; 1.0 Vp-p, 75Ω C; 0.286 Vp-p (burst), 75Ω
Reference input:	Analog composite BNC×2, loop-through, 75Ω on/off
Serial digital component input (option)*:	Complies with SMPTE259M-C standard, BNC×2, active through

(Video output connector)

Analog component output:	BNC×3 (Y, P _B , P _R) Y; 1.0 Vp-p, 75Ω P _B , P _R ; 0.486/0.7 Vp-p switchable, 75Ω (75% color bar, 7.5% setup)
Analog composite output:	BNC×3 Video1/video2/video3 (superimpose on/off)
S VIDEO output:	S terminal (4-pin)×1 Y; 1.0 Vp-p, 75Ω C; 0.286 Vp-p (burst), 75Ω
Serial digital component output (option):	Complies with SMPTE259M-C standard, BNC×3

(Video signals adjustment)

Video output gain:	±3 dB
Video output chroma gain:	±3 dB
Video output hue:	±30°
Video output setup:	±15 IRE
Video output sync phase:	±2 μs
Video output SC phase:	±180°

} Control from ENCODER
REMOTE connector

AUDIO

(Digital audio)

Sampling frequencies:	48 kHz
Quantizing:	16 bits
Frequency response:	20 Hz to 20 kHz (±1.0 dB)
Dynamic range:	Better than 85 dB (1 kHz, emphasis OFF, "A" weighted)

Distortion:	Less than 0.1% (1 kHz, emphasis OFF, standard level)
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Crosstalk:	Less than –80 dB (1 kHz, between 2 channels)
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Wow & flutter:	Below measurable limits
Headroom:	20 dB
De-emphasis:	T1=50 μs/T2=15 μs (on/off automatic)

(Cue track)

Frequency response:	300 Hz to 6 kHz ±3 dB
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(Audio input connector)*

Analog input (CH1/CH2):	XLR×2, 600Ω/high impedance selectable, +4/0/–20/–60 dBu
Digital input (CH1/CH2) (option):	BNC×1, AES/EBU format
Serial digital input (option):	Complies with SMPTE259M-C, 272M standard (BNC)

(Audio output connector)

Analog output (CH1/CH2):	XLR×2, low impedance, +4/0/–20 dBu
Digital output (CH1/CH2) (option):	BNC×1, AES/EBU format
Serial digital output (option):	Complies with SMPTE259M-C, 272M standard (BNC)
Monitor output:	Phono×1, 600 Ω, –8 dBV
Headphones:	Variable level, 1/4" phone, 8Ω

Other input/output connector

Time code input*:	BNC×1, 0.5 to 8 Vp-p
Time code output:	BNC×1, 2.0 Vp-p
RS-422A input/output:	D-sub 9-pin, RS-422A interface
RS-232C:	D-sub 25-pin, RS-232C interface
Encoder remote:	D-sub 15-pin

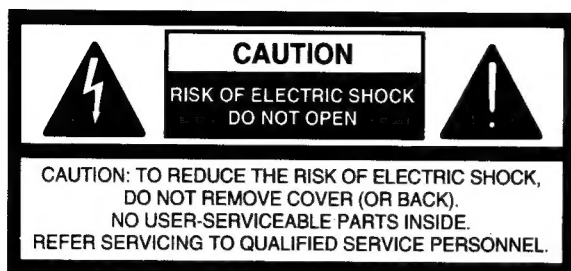
Weight and dimensions when shown are approximately.
Specifications are subject to change without notice.

* Items marked with an asterisk (*) indicate AJ-D450 only.

IMPORTANT

"Unauthorized recording of copyrighted television programs, video tapes and other materials may infringe the right of copyright owners and be contrary to copyright laws."

AJ-D440_P AJ-D450_P



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

CAUTION:

To reduce the risk of fire or shock hazard and annoying interference, use the recommended accessories only.

WARNING:

To reduce the risk of fire or shock hazard, do not expose this equipment to rain or moisture.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER MOUNTING OF THE OPTIONAL INTERFACE BOARD TO AUTHORIZED SERVICE PERSONNEL.

FCC Note:

This device complies with Part 15 of the FCC Rules. To assure continued compliance follow the attached installation instructions and do not make any unauthorized modifications.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

 is the safety information.

- Do not insert fingers or any objects into the video cassette holder.
- Avoid operating or leaving the unit near strong magnetic fields. Be especially careful of large audio speakers.
- Avoid operating or storing the unit in an excessively hot, cold, or damp environment as this may result in damage both to the recorder and to the tape.
- Do not spray any cleaner or wax directly on the unit.
- If the unit is not going to be used for a length of time, protect it from dirt and dust.
- Do not leave a cassette in the recorder when not in use.
- Do not block the ventilation slots of the unit.
- Use this unit horizontally and do not place anything on the top panel.
- Cassette tape can be used only for one-side, one direction recording. Two-way or two-track recordings cannot be made.
- Cassette tape can be used for either Color or Black & White recording.
- Do not attempt to disassemble the recorder. There are no user serviceable parts inside.
- If any liquid spills inside the recorder, have the recorder examined for possible damage.
- Refer any needed servicing to authorized service personnel.

Specifications

GENERAL

Power supply:	AC 220 V – 240 V, 50 – 60 Hz
Power consumption:	AJ-D440; 130 W AJ-D450; 150 W

Operating ambient temperature:	5°C to 40°C
Operating ambient humidity:	10% to 90% (no condensation)
Weight:	AJ-D440; 14.6 kg AJ-D450; 15.5 kg
Dimensions (W × H × D):	424 × 175 × 415 mm
Recording format:	DVCPRO format
Recording tracks:	Digital video Time code; Recorded in sub-code area Digital audio; 2 channels Cue Signal; 1 track Control (CTL); 1 track
Tape speed:	33.854 mm/sec.
Recording time:	184 minutes (with AJ-5P92LP) 66 minutes (with AJ-P66MP)
Tape:	1/4-inch thin magnetic layer metal tape
FF/REW time:	Less than 3 min (with AJ-5P92LP) Less than 2 min (with AJ-P66MP)
Editing accuracy*:	±0 frame (using time code)
Tape timer accuracy:	±1 frame (using continuous CTL signal)
Servo lock time:	Less than 0.5 sec. (colour framing/standby ON)

VIDEO

(Digital video)	
Sampling frequencies:	Y; 13.5 MHz/P _B , P _R ; 3.375 MHz
Quantizing:	8 bits
Error correction:	Reed-Solomon product code
(Digital IN/analogue component OUT)	
Video bandwidth:	Y; 25 Hz to 5.5 MHz (±1.0 dB) P _B , P _R ; 25 Hz to 1.3 MHz (±1.0 dB)
S/N ratio:	Better than 56 dB
K factor:	Less than 2%

(Analogue component IN/component OUT)

Video bandwidth:	Y; 25 Hz to 5.5 MHz (–1.5 dB to +1.0 dB) P _B , P _R ; 25 Hz to 1.3 MHz (–2.0 dB to +1.0 dB)
S/N ratio:	Better than 55 dB
K factor:	Less than 2%

(Analogue composite IN/composite OUT)

Video bandwidth:	Y; 25 Hz to 5.5 MHz (–1.5 dB to +1.0 dB)
DG:	Less than 4%
DP:	Less than 3%
Y/C delay:	Better than 20 ns
K factor:	Less than 3%
S/N ratio:	Better than 48 dB

(Video input connector)*

Analogue component input*:	BNC×3 (Y, P _B , P _R) Y; 1.0 Vp-p, 75Ω P _B , P _R ; 0.7 Vp-p, 75Ω (100% colour bar)
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Analogue composite input*:	BNC×2, loop-through, 75Ω on/off
S VIDEO input*:	S terminal (4-pin) × 1 Y; 1.0 Vp-p, 75Ω C; 0.3 Vp-p (burst), 75Ω

Reference input:

Analogue composite
BNC × 2, loop-through, 75Ω on/off

Serial digital component input (option)*:

Complies with EBU Tech. 3267-E standard, BNC × 2, active through

(Video output connector)

Analogue component output:	BNC × 3 (Y, P _B , P _R) Y; 1.0 Vp-p, 75Ω P _B , P _R ; 0.7 Vp-p, 75Ω (100% colour bar)
Analogue composite output:	BNC × 3 Video1/video2/video3 (superimpose on/off)
S VIDEO output:	S terminal (4-pin) × 1 Y; 1.0 Vp-p, 75Ω C; 0.3 Vp-p (burst), 75Ω
Serial digital component output (option):	Complies with EBU Tech. 3267-E standard, BNC × 3

(Video signals adjustment)

Video output gain:	±3 dB
Video output chroma gain:	±3 dB
Video output chroma phase:	±30°
Video output black level:	±100 mV
Video output sync phase:	±2 μsec
Video output SC phase:	±180°

Control from ENCODER REMOTE connector

AUDIO

(Digital audio)	
Sampling frequencies:	48 kHz
Quantizing:	16 bits
Frequency response:	20 Hz to 20 kHz (±1.0 dB)
Dynamic range:	Better than 85 dB (1 kHz, emphasis OFF, "A" weighted)
Distortion:	Less than 0.1% (1 kHz, emphasis OFF, standard level)
Crosstalk:	Less than –80 dB (1 kHz, between 2 channels)
Wow & flutter:	Below measurable limits
Headroom:	18 dB
De-emphasis:	T1 = 50 μsec/T2 = 15 μsec (on/off automatic)
(Cue track)	
Frequency response:	300 Hz to 6 kHz ±3 dB

(Audio input connector)*

Analogue input (CH1/CH2):	XLR × 2, 600Ω/high impedance selectable, +4/0/–20/–60 dBu
Digital input (CH1/CH2) (option):	BNC × 1, AES/EBU format
Serial digital input (option):	Complies with EBU Tech. 3267-E standard (BNC)

(Audio output connector)

Analogue output (CH1/CH2):	XLR × 2, low impedance, +4/0/–20 dBu
Digital output (CH1/CH2) (option):	BNC × 1, AES/EBU format
Serial digital output (option):	Complies with EBU Tech. 3267-E standard (BNC)
Monitor output:	Phono×1, 600Ω, –8 dBV
Headphones:	Variable level, 1/4" phone, 8Ω

Other input/output connector

Time code input*:	BNC × 1, 0.5 to 8 Vp-p
Time code output:	BNC × 1, 2.0 Vp-p
RS-422A input/output:	D-sub 9-pin, RS-422A interface
RS-232C:	D-sub 25-pin, RS-232C interface
Encoder remote:	D-sub 15-pin

* Items marked with an asterisk (*) indicate AJ-D450 only.

Weight and dimensions shown are approximate.
Specifications are subject to change without notice.

Caution for AC Mains Lead

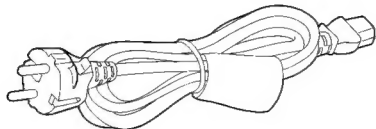
FOR YOUR SAFETY PLEASE READ THE FOLLOWING TEXT CAREFULLY.

This product is equipped with 2 types of AC mains cable. One is for continental Europe, etc. and the other one is only for U.K.

Appropriate mains cable must be used in each local area, since the other type of mains cable is not suitable.

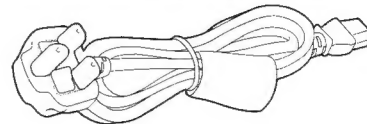
FOR CONTINENTAL EUROPE, ETC.

Not to be used in the U.K.



FOR U.K. ONLY

If the plug supplied is not suitable for your socket outlet, it should be cut off and appropriate one fitted.





FOR U.K. ONLY

This appliance is supplied with a moulded three pin mains plug for your safety and convenience.

A 13 amp fuse is fitted in this plug.

Should the fuse need to be replaced please ensure that the replacement fuse has a rating of 13 amps and that it is approved by ASTA or BSI to BS1362.

Check for the ASTA mark  or the BSI mark  on the body of the fuse.

If the plug contains a removable fuse cover you must ensure that it is refitted when the fuse is replaced.

If you lose the fuse cover the plug must not be used until a replacement cover is obtained.

A replacement fuse cover can be purchased from your local Panasonic Dealer.

IF THE FITTED MOULDED PLUG IS UNSUITABLE FOR THE SOCKET OUTLET IN YOUR HOME THEN THE FUSE SHOULD BE REMOVED AND THE PLUG CUT OFF AND DISPOSED OF SAFELY. THERE IS A DANGER OF SEVERE ELECTRICAL SHOCK IF THE CUT OFF PLUG IS INSERTED INTO ANY 13 AMP SOCKET.

If a new plug is to be fitted please observe the wiring code as shown below.


If in any doubt please consult a qualified electrician.

WARNING: THIS APPLIANCE MUST BE EARTHED.

IMPORTANT: The wires in this mains lead are coloured in accordance with the following code:

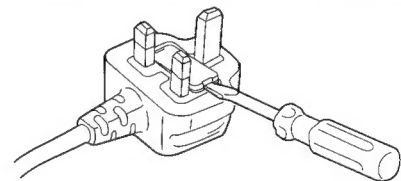
Green-and-Yellow:	Earth
Blue:	Neutral
Brown:	Live

As the colours of the wires in the mains lead of this appliance may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:

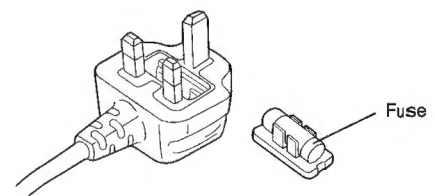
- The wire which is coloured GREEN-AND-YELLOW must be connected to the terminal in the plug which is marked with the letter E or by the Earth symbol  or coloured GREEN or GREEN-AND-YELLOW.
- The wire which is coloured BLUE must be connected to the terminal in the plug which is marked with the letter N or coloured BLACK.
- The wire which is coloured BROWN must be connected to the terminal in the plug which is marked with the letter L or coloured RED.

How to replace the fuse

1. Open the fuse compartment with a screwdriver.



2. Replace the fuse.



IMPORTANT

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■ THIS APPARATUS MUST BE EARTHED

To ensure safe operation the three-pin plug must be inserted only into a standard three-pin power point which is effectively earthed through the normal house-hold wiring.

Extension cords used with the equipment must be three-core and be correctly wired to provide connection to earth. Wrongly wired extension cords are a major cause of fatalities.

The fact that the equipment operates satisfactorily does not imply that the power point is earthed and that the installation is completely safe. For your safety, if in any doubt about the effective earthing of the power point, consult a qualified electrician.

■ DO NOT REMOVE PANEL COVER BY UNSCREWING

To reduce the risk of electric shock, do not remove cover. No user serviceable parts inside. And do not insert fingers or any other objects into the video cassette holder.

WARNING:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSOIRES ONLY.

CAUTION:

TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER MOUNTING OF THE OPTIONAL BOARD TO QUALIFIED SERVICE PERSONNEL.

Operating precaution

Operation near any appliance which generates strong magnetic fields may give rise to noise in the video and audio signals. If this should be the case, deal with the situation by, for instance, moving the source of the magnetic fields away from the unit before operation.

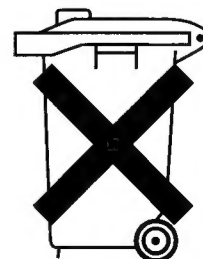
CAUTION:

Do not install or place this unit in a bookcase, built-in cabinet or another confined space in order to maintain adequate ventilation. Ensure that curtains and any other materials do not obstruct the ventilation to prevent risk of electric shock or fire hazard due to overheating.

 is the safety information.

Attention/Attentie

- This apparatus contains a lithium battery for memory back-up.
- For the removal of the battery at the moment of the disposal at the end of the service life please consult your dealer.
- Do not throw away the battery. Instead, hand it in as hazardous waste.
- Dit apparaat bevat een lithiumbatterij voor memory back-up.
- Raadpleeg uw leverancier over de verwijdering van de batterij op het moment dat u het apparaat bij einde levensduur afdankt.
- Gooi de batterij niet weg, maar lever hem in als KCA.



SAFETY PRECAUTIONS

GENERAL GUIDELINES

1. When servicing, observe the original lead dress. If a short circuit is found, replace all parts which have been overheated or damaged by the short circuit.
2. After servicing, see to it that all the protective devices such as insulation barriers, insulation papers shields are properly installed.
3. After servicing, make the following leakage current checks to prevent the customer from being exposed to shock hazards.

LEAKAGE CURRENT COLD CHECK

1. Unplug the AC cord and connect a jumper between the two prongs on the plug.
2. Measure the resistance value, with an ohmmeter, between the jumpered AC plug and each exposed metallic cabinet part on the equipment such as screwheads, connectors, control shafts, etc. When the exposed metallic part has a return path to the chassis, the reading should be between $1\text{M}\Omega$ and $5.2\text{M}\Omega$.

When the exposed metal does not have a return path to the chassis, the reading must be ∞ .

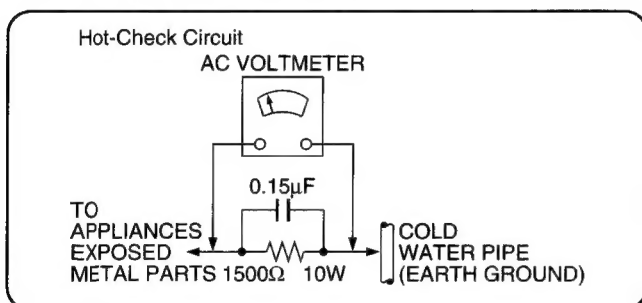


Figure 1

LEAKAGE CURRENT HOT CHECK (See Figure 1.)

1. Plug the AC cord directly into the AC outlet. Do not use an isolation transformer for this check.
2. Connect a $1.5\text{k}\Omega$, 10 W resistor, in parallel with a $0.15\mu\text{F}$ capacitor, between each exposed metallic part on the set and a good earth ground such as a water pipe, as shown in Figure 1.
3. Use an AC voltmeter, with 1000 ohms/volt or more sensitivity, to measure the potential across the resistor.
4. Check each exposed metallic part, and measure the voltage at each point.
5. Reverse the AC plug in the AC outlet and repeat each of the above measurements.
6. The potential at any point should not exceed 0.75 volts RMS . A leakage current tester (Simpson Model 229 equivalent) may be used to make the hot checks, leakage current must not exceed $1/2\text{ milliamp}$. In case a measurement is outside of the limits specified, there is a possibility of a shock hazard, and the equipment should be repaired and rechecked before it is returned to the customer.

ELECTROSTATICALLY SENSITIVE (ES) DEVICES

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field-effect transistors and semiconductor "chip" components. The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.
2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.
3. Use only a grounded-tip soldering iron to solder or unsolder ES devices.
4. Use only an anti-static solder removal device classified as "anti-static" can generate electrical charges sufficient to damage ES devices.
5. Do not use freon-propelled chemicals. These can generate electrical charges sufficient to damage ES devices.
6. Do not remove a replacement ES device from its protective package until immediately before you are ready to install it. (most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil or comparable conductive material).
7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.
CAUTION: Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.
8. Minimize bodily motions when handling unpackaged replacement ES devices. (Otherwise harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device).

X-RADIATION

WARNING

1. The potential source of X-Radiation in EVF sets is the High Voltage section and the picture tube.
2. When using a picture tube test jig for service, ensure that jig is capable of handling 10kV without causing X-Radiation.

NOTE: It is important to use an accurate periodically calibrated high voltage meter.

3. Measure the High Voltage. The meter (electric type) reading should indicate 2.5kV , $\pm 0.15\text{kV}$. If the meter indication is out of tolerance, immediate service and correction is required to prevent the possibility of premature component failure. To prevent an X-Radiation possibility, it is essential to use the specified picture tube.

SECTION 1

OPERATING INSTRUCTIONS

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Before operating this unit, check that all of its accessories are present and accounted for.

Power cord....1 pc

Option

- AJ-YA750P component serial interface board
- AJ-CS750P Cassette adaptor
- AJ-MA75P Rack mounting adaptor
- AJ-YA655P Digital Audio Interface Board
- AJ-YA752P Audio memory unit

General and Features

This unit is a digital video cassette recorder which uses 1/4-inch tapes.

It incorporates digital compression technology so that the deterioration in picture quality and sound quality resulting from dubbing is significantly minimized compared with existing analog systems.

Furthermore, since it has a compact 4U size and light weight, the unit can be carried around or mounted in a 19-inch rack with ease.

The settings for the unit's setup can be performed while viewing the screen menus on the TV monitor. With the AJ-D450 unit, both assemble and insert editing are possible through external control.

Features

Compact size and light weight

This is a 4U size digital VTR. It can be mounted in a 19-inch rack with ease using the optional rack-mounting adaptors (AJ-MA75P).

Up to 184 minutes of recording

Two sizes of cassette tapes can be used with this unit: M cassette (max. 66 minutes) and L cassette (max. 184 minutes). The width of the tapes measures 1/4 inch to achieve a compact design.

Compatibility with consumer products

Consumer cassette tapes shot with digital cameras available on the consumer market can be played back on this unit using the optional cassette adaptor (AJ-CS750P).

<Notes>

- Slow motion playback is not possible with consumer cassette tapes.
- Consumer cassette tapes recorded in LP mode cannot be played back.

Digital slow motion/jog

The slow motion playback images can be reproduced clearly at any of the speeds given below using commands from the external controller or other such device: $-0.43/-0.3/-0.2/-0.1/-0.03/0/+0.03/+0.1/+0.2/+0.3/+0.5/+0.75$.

<Notes>

- Some noise may occur when the slow motion speed is changed.
- When slow motion playback is used, the image shakes slightly in the vertical direction.

Dialy shuttle operation is possible through the external controller

Shuttle operations enable the tape to be played back with color images at a speed of up to 60 times normal tape speed in either the forward or reverse direction.

Time codes

This unit comes with a built-in time code generator* (TCG)/time code reader (TCR). In addition to the internal time code, an external time code input or input signal VITC can be recorded in the machine as the LTC time code.

* Applicable only to AJ-D450.

Features

(continued)

Multi-function input/output interfaces (AJ-D450 only for input)

- **Analog input/output**

Component (Y, P_B, P_R) and composite and S-VIDEO signal input and output connectors are provided.

- **Digital audio input/output**

AES/EBU audio input/output is possible when the optional digital audio interface board (AJ-YA655P) is used.

- **Serial digital input/output**

Serial digital (SMPTE 259M-C, 272M) input/output is possible when the optional component serial interface board (AJ-YA750P) is used.

<Note>

The AJ-YA655P board, sold separately, is necessary when using serial digital audio (SMPTE 272M).

- **9-pin (RS-422A)/(RS-232C) remote**

The standard 9-pin serial (RS-422A) connector or RS-232C connector is used.

2-channel high-sound-quality digital audio (AJ-D450 only for recording)

Sound can be edited separately for two channels, and channel mixing capabilities are also available. One channel is provided for the analog cue track.

Information selected from audio CH1 and CH2 can be recorded in the cue track memory. (Set at the set up menu.)

- Cue track input and output connectors are not provided.

Automatic editing functions from the external controller (only AJ-D450)

AJ-D450 allows both assemble and insert editing from the external controller.

Menu-driven setup

The setup settings, which are conducted prior to operating the unit, are performed while viewing the setup menus either on the unit display or TV monitor.

General and Features

Features

(continued)

Multi-function input/output interfaces (AJ-D450 only for input)

- **Analogue input/output**

Component (Y, Pb, Pr) and composite and S-VIDEO signal input and output connectors are provided.

- **Digital audio input/output**

AES/EBU audio input/output is possible when the optional digital audio interface board (AJ-YA655P) is used.

- **Serial digital input/output**

Serial digital (EBU Tech. 3267-E) input/output is possible when the optional component serial interface board (AJ-YA750P) is used.

<Note>

The AJ-YA655P board, sold separately, is necessary when using serial digital audio (EBU Tech. 3267-E).

- **9-pin (RS-422A)/(RS-232C) remote**

The standard 9-pin serial (RS-422A) connector or RS-232C connector is used.

2-channel high-sound-quality digital audio (AJ-D450 only for recording)

Sound can be edited separately for two channels, and channel mixing capabilities are also available. One channel is provided for the analogue cue track.

Information selected from audio CH1 and CH2 can be recorded in the cue track memory. (Set at the set up menu.)

- Cue track input and output connectors are not provided.

Automatic editing functions from the external controller (only AJ-D450)

AJ-D450 allows both assemble and insert editing from the external controller.

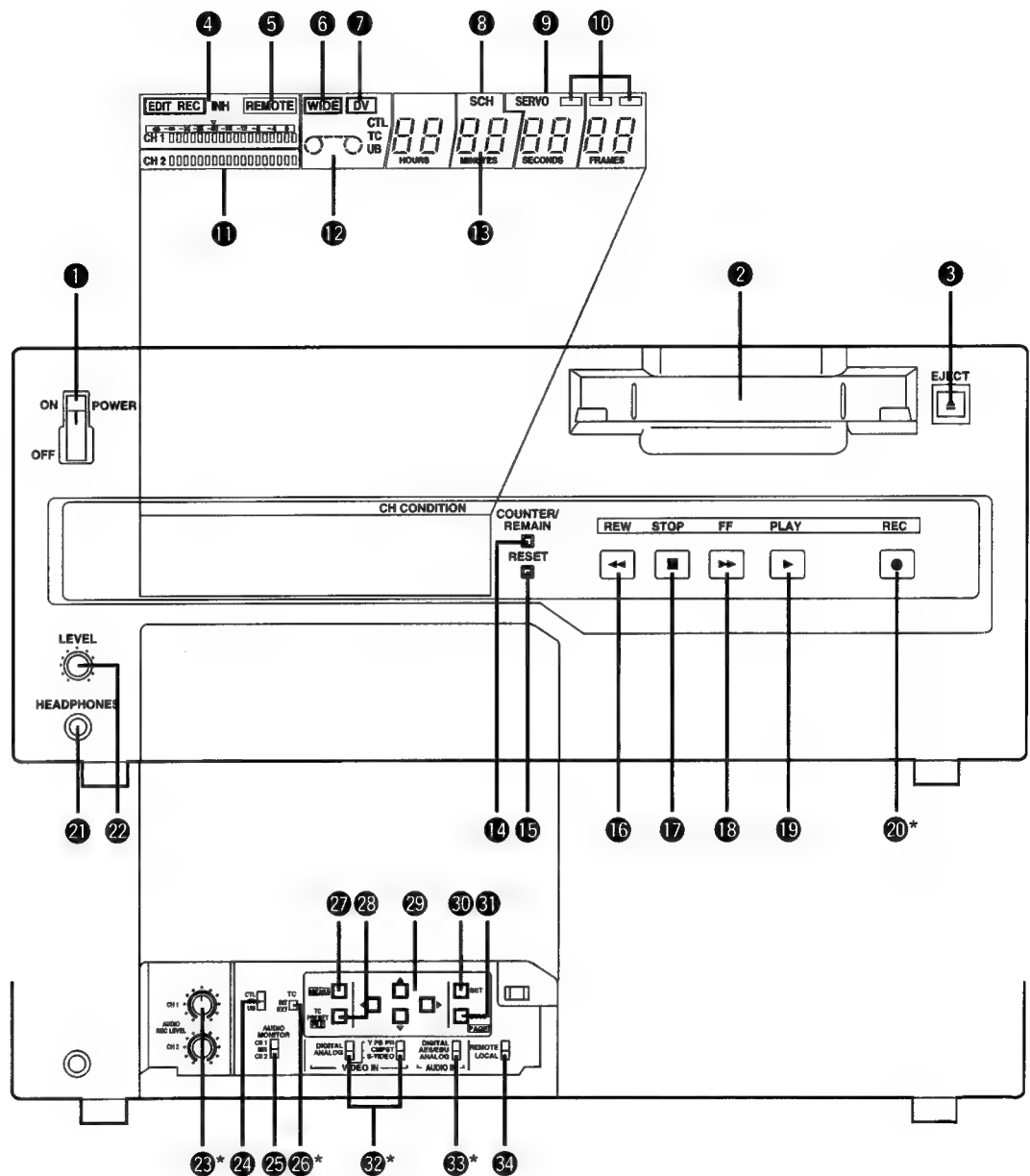
Menu-driven setup

The setup settings, which are conducted prior to operating the unit, are performed while viewing the setup menus either on the unit display or TV monitor.

Controls and their functions

Front panel

Counter Display Section



* Applicable only to A.J-D450.

① POWER switch

When the ON side is pressed, the power is switched on, and the counter display lights up.

② Cassette insertion slot

The M cassette, L cassette and consumer cassette (S cassette) with adaptor are inserted into this slot.

Consumer cassettes can be played back only.

③ EJECT button

When this is pressed, the tape is unloaded and several seconds later the cassette is automatically ejected. When the counter display indicates "CTL", the display is reset.

④ EDIT/EDIT REC/REC/REC INH lamps (AJ-D450 only)

EDIT: This lights when the editing mode is chosen from the 9P remote control.

EDIT REC: This lights when editing from the 9P remote control.

REC: This lights during video recording.

REC INH: This lights when the accidental erasure prevention mode has been set for the cassette. In this state, neither recording nor editing is possible.

⑤ REMOTE lamp

This lights when the REMOTE/LOCAL switch has been set to the REMOTE position.

⑥ WIDE lamp

This lights when the unit is in 16:9 wide screen mode.

⑦ Consumer cassette insertion display lamp

This lights when a cassette recorded on a consumer DV device has been inserted.

⑧ SCH lamp

This lights when the SCH of the external sync signal is within a specific range.

⑨ SERVO lamp

This lights when the drum servo and capstan servo have locked.

⑩ Channel condition lamps

One of these lamps lights in accordance with the error rate status. (Green→blue→red)

Green: This lights when the error rates for the video and audio playback signals are both acceptable.

Blue: This lights when the error rate for the video or audio playback signals has deteriorated.

The playback picture will remain normal even when this lamp lights.

Red: This lights when the video or audio signals are subject to rectification or interpolation.

⑪ Level meters

These indicate the PCM audio signal CH1/CH2.

The audio signal indicates the input signal levels during recording and EE selection, and the output signal levels during playback.

⑫ Cassette insertion display lamp

This lights when a cassette has been inserted into the unit.

⑬ Counter display

This displays the TC and CTL count values, on-screen information and other messages.

Controls and their functions (continued)

⑭ COUNTER/REMAIN button

This switches between the tape counter tape time indicator and the remaining tape indicator. [r ***] is displayed in the case of the remaining tape indicator. After the cassette tape is inserted, [r — —] (— — flashes) is displayed until remaining tape is calculated, and [r EJ] (EJ flashes) when ejecting the tape.

⑮ RESET button

When this is pressed during CTL mode, the counter returns to the 00:00:00:00 display. During menu setup, initial setting values are restored when the RESET button is pressed.

⑯ REW button*¹

The tape is rewound when this is pressed.

The unit goes into shuttle (SHTL) mode at $-9.5 \times$ normal tape speed when this button is pressed together with the PLAY button.

⑰ STOP button

When this is pressed, the tape stops traveling, and if the setup menu No. 111 (STOP EE SEL) is set to TAPE, still pictures can be monitored.

The drum continues to rotate even in the stop mode, and the tape remains in close contact with the drum.

If the stop mode continues for more than a certain period of time, the unit automatically switches to the standby OFF mode in order to protect the tape.

The stop mode is established immediately after a cassette has been inserted into the unit.

⑱ FF button*¹

The tape is fast forwarded when this is pressed.

The unit goes into shuttle (SHTL) mode at $+9.5 \times$ normal tape speed when this button is pressed together with the PLAY button.

⑲ PLAY button

Playback commences when this button is pressed.

Recording commences when the button is pressed together with the REC button.

⑳ REC button (AJ-D450 only)

Recording commences when this button is pressed together with the PLAY button.

When it is pressed during playback, search*², fast forward or rewind, EE mode images and audio signals can be monitored for as long as it is kept depressed.

When it is pressed in the stop mode, EE mode images and sound can be monitored.

When the STOP button is pressed, the original picture and sound are restored.

*¹ The FF/REW speed can be selected on the setup menu NO. 102 (FF. REW MAX), and it is set to the same speed.

*² No guarantee is made for the audio EE mode.

21 Headphones jack

The sound being recorded, played back or edited can be monitored on stereo headphones when they are connected to this jack.

22 Volume control

This is used to adjust the headphones volume.

23 Audio recording level controls (AJ-D450 only)

These are used to adjust the recording levels of the analog audio signal CH1/CH2.

24 CTL/TC/UB switch

Use this switch when selecting the counter display.

CTL: Tape timer (control signal) is displayed.

TC: Time code is displayed.

UB: User bit is displayed.

25 MONITOR SELECT switch

This is used to select the audio signals output to the monitor channel.

(With the No. 713 (MONI CH SEL) setting on the setup menu, the display may not match the monitor output.)

26 INT/EXT switch (AJ-D450 only)

INT: For using the built-in time code generator.

EXT: For using the time external code which is input from the time code input connector or the video signal VITC. The selection is set at the setup menu.

27 MENU button

When this is pressed, the setup menu appears on the TV monitor using VIDEO OUT 3 connector, and the setup menu No. appears on the display.

When it is pressed again, the setup mode is exited and the original operating mode is restored.

28 TC PRESET (FILE) button (TC PRESET function: AJ-D450 only)

When this is pressed, the time code setting mode is established.

User file can be selected when the cursor buttons (◀, ▶) are used during the setup menu mode. (For details, see setup menu items on page 26.)

29 Cursor buttons (◀, ▶, ▲, ▼)

These are used when setting time codes and settings at menu setup.

◀, ▶: These change the flashing digit in the time code indicators.

Each time they are pressed, the flashing indicator moves incrementally to the left or right.

◀ increments to the left; ▶ increments to the right.

▲, ▼: These change the flashing digit in the time code indicators.

Each time they are pressed, the indicated value increments and decrements.

▼ decrements the value; ▲ increments the value.

The flashing digit changes continuously when the button is continuously pressed.

For details about operation during setup menu mode, see setup menu items (page 25).

Controls and their functions (continued)

30 SET button

When this is pressed, the data which has been set on the setup menu is entered. After data entry, the setup mode is exited and the original operating mode is restored.

31 DIAG button

When this is pressed, VTR information is displayed. When it is pressed again, the original display is restored.

There are two types of VTR information: "HOURS METER" information and "WARNING" information. Switching between these types is enabled by pressing the cursor buttons (◀, ▶).

Indicated on the "HOUR METER" screen are the power-on time, drum rotation time, tape travel time, loading count, etc.

Indicated on the "WARNING" screen are the warnings.

32 VIDEO INPUT switch (AJ-D450 only)

This switches the video input signal.

DIGITAL: For selecting serial component digital video signal (SMPTE 259M-C) recording.*

ANALOG: For selecting analog video signal recording.

Select the analog video signal as follows to correspond with the input signal.

Y PB PR: For recording an analog component video signal.

CMPST: For recording an analog composite video signal.

S-VIDEO: For recording a S-VIDEO signal.

* The optional AJ-YA750P serial interface board is necessary.

33 AUDIO INPUT switch (AJ-D450 only)

This switches the audio input signal.

DIGITAL: For selecting serial digital audio signal (SMPTE 272M) recording.*¹

AES/EBU: For recording a digital audio signal.*²

ANALOG: For recording an analog audio signal.

*¹ Both the optional AJ-YA750P serial interface board and the optional AJ-YA655P digital audio interface board are necessary.

*² The optional AJ-YA655P digital audio interface board is necessary.

34 REMOTE/LOCAL switch

This switch is set when the unit is to be controlled from an external source using the REMOTE connector or RS-232C connector.

REMOTE: Set to this position when controlling the unit by a device connected using the 9-pin REMOTE connector or RS-232C connector.

LOCAL: Set to this position when controlling the unit using the controls on its own operation panel.

30 SET button

When this is pressed, the data which has been set on the setup menu is entered. After data entry, the setup mode is exited and the original operating mode is restored.

31 DIAG button

When this is pressed, VTR information is displayed. When it is pressed again, the original display is restored.

There are two types of VTR information: "HOURS METER" information and "WARNING" information. Switching between these types is enabled by pressing the cursor buttons (◀, ▶).

Indicated on the "HOUR METER" screen are the power-on time, drum rotation time, tape travel time, loading count, etc.

Indicated on the "WARNING" screen are the warnings.

32 VIDEO INPUT switch (AJ-D450 only)

This switches the video input signal.

DIGITAL: For selecting serial component digital video signal (EBC Tech. 3267-E) recording.*

ANALOG: For selecting analogue video signal recording.

Select the analogue video signal as follows to correspond with the input signal.

Y PB PR: For recording an analogue component video signal.

CMPST: For recording an analogue composite video signal.

S-VIDEO: For recording a S-VIDEO signal.

* The optional AJ-YA750P serial interface board is necessary.

33 AUDIO INPUT switch (AJ-D450 only)

This switches the audio input signal.

DIGITAL: For selecting serial digital audio signal (EBU Tech. 3267-E) recording.*¹

AES/EBU: For recording a digital audio signal.*²

ANALOG: For recording an analogue audio signal.

*¹ Both the optional AJ-YA750P serial interface board and the optional AJ-YA655P digital audio interface board are necessary.

*² The optional AJ-YA655P digital audio interface board is necessary.

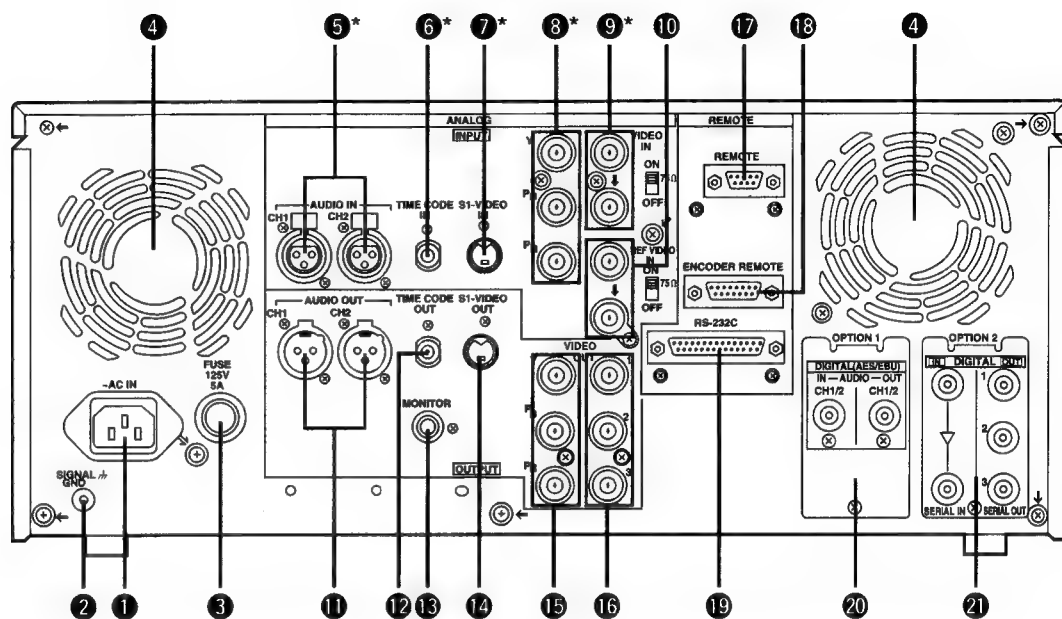
34 REMOTE/LOCAL switch

This switch is set when the unit is to be controlled from an external source using the REMOTE connector or RS-232C connector.

REMOTE: Set to this position when controlling the unit by a device connected using the 9-pin REMOTE connector or RS-232C connector.

LOCAL: Set to this position when controlling the unit using the controls on its own operation panel.

Connector area



* Applicable only to AJ-D450.

Controls and their functions (continued)

<Connector area>

① AC IN connector

This is for connecting the unit to the power outlet using the power cord provided.

② SIGNAL GND terminal

This terminal is connected to the signal unit which is connected to the unit in order to reduce noise. It is not connected to ground for safety purposes.

③ Fuse holder

This contains a fuse.

④ Fan motor

This is for cooling the unit.

The error code is displayed on the counter when trouble has caused the fan motor to stop. If the unit is still operated in the warning status, the temperature inside the deck will rise, and when it exceeds the safety temperature, all the unit's operations will be shut down.

⑤ ANALOG AUDIO IN connectors*

These are the analog audio input connectors.

⑥ TIME CODE IN connector*

This is the connector for recording the external time code on the tape.

⑦ S1-VIDEO IN connector*

This is the S-VIDEO input connector.

⑧ ANALOG COMPONENT VIDEO IN connector*

The analog component video signal is supplied to this connector.

⑨ ANALOG COMPOSITE VIDEO IN connectors and 75Ω termination switch*

The analog composite video signal is supplied to these two connectors which are connected in a loop-through configuration. When the termination is required, set the switch to ON.

⑩ REF VIDEO IN connectors and 75Ω termination switch

These are the input connectors for the reference video signals. When the termination is required, set the switch to ON.

⑪ ANALOG AUDIO OUT connectors

The analog audio signals are output from these connectors.

⑫ TIME CODE OUT connector

The playback time code is output from this connector during playback.

During recording, the time code generated by the internal time code generator is output.

⑬ MONITOR OUT connector

The playback signals from the CUE track or PCM audio signal CH1/CH2 are output from this connector.

* Applicable only to
AJ-D450.

<Connector area>

⑭ S1-VIDEO OUT connector

This is the S-VIDEO output connector.

⑮ ANALOG COMPONENT VIDEO OUT connector

The analog component video signal is output from this connector.

⑯ ANALOG COMPOSITE VIDEO OUT connectors

The analog composite video signals are output from these connectors.

The video signal with signals superimposed on it can be output from the VIDEO OUT3 connector.

The superimpose function can be set ON or OFF on the setup menu No. 006 (SUPER).

⑰ REMOTE connector

The unit can be controlled from an external source by connecting an external controller.

⑱ ENCODER REMOTE connector

The external encoder/controller is hooked up to this connector when the video output signal and other settings are to be adjusted from an external source.

⑲ RS-232C connector

⑳ DIGITAL AUDIO IN/OUT connector (optional AJ-YA655P required.)

This I/O connector is for digital audio signals which comply with the AES/EBU standard.

<Note>

Does not input with AJ-D440.

㉑ SERIAL DIGITAL COMPONENT AUDIO/VIDEO IN/OUT connector (optional AJ-YA750P interface board required)

This I/O connector is for digital component audio and video signals which comply with the SMPTE 259M-C/272M standard.

The optional AJ-YA655P is required for digital audio signal output on the AJ-YA750P board.

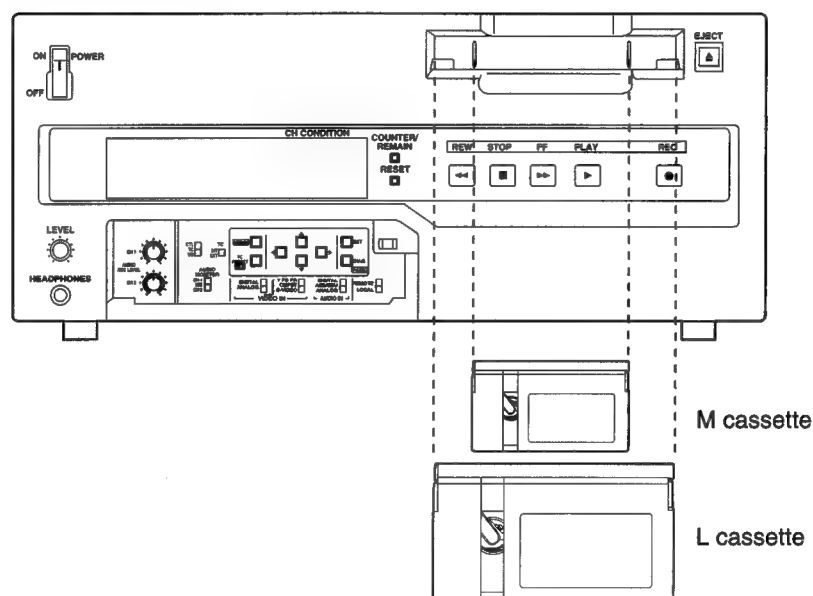
<Note>

Does not input with AJ-D440.

Tapes

Type	Description
Consumer cassette (S cassette)	Tape designed exclusively for the camcorders used by consumers in general. Only playback is possible using the optional cassette adaptor (AJ-CS750P). However, please note that long-play cassette tapes (80-minute standard/120-minute LP mode) cannot be used. Use of Panasonic consumer DV cassette tapes is recommended. Note that inserting a cassette tape without using the cassette adaptor can damage the unit.
M cassette	Recording/playback tape with a maximum capacity of 66 minutes. (AJ-P12MP, AJ-P24MP, AJ-P33MP, AJ-P46MP, AJ-P66MP)
L cassette	Recording/playback tape with a maximum capacity of 184 minutes. (AJ-P34LP, AJ-P66LP, AJ-P94LP, AJ-P126LP, AJ-5P92LP)

Align the cassette with the center of the insertion slot and push it in gently. The cassette tape is loaded automatically.



<Note>

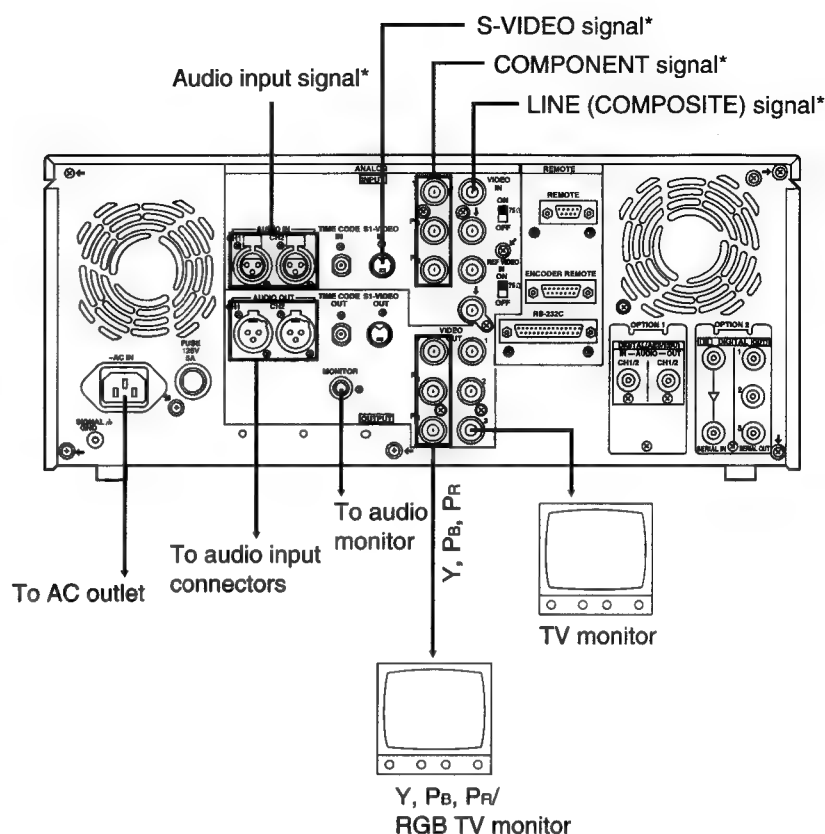
For AJ-5P92LP cassette tape, use a VTR supporting DVCPRO (25 Mbps) 184 minute tapes.

<Cautions when playing back consumer DV tapes and DVCAM tapes>

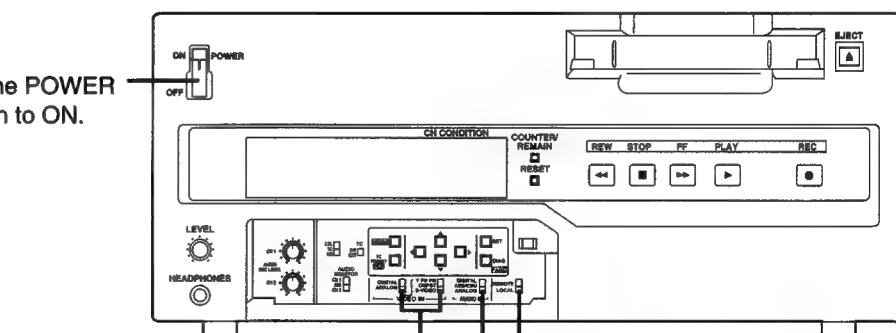
- Consumer DV tapes and DVCAM tapes can be used for playback only.
- Consumer DV tapes which have been recorded in the LP mode cannot be played back.
- When materials which have been recorded on consumer DV tapes or DVCAM tapes are to be edited, record them onto a DVCPRO tape or tape of any other broadcasting VTR for use.
- Recordings cannot be made on consumer DV tapes and DVCAM tapes: this means that all functions related to recording, REC operation, TAPE/EE switching and other such operations are prohibited.
- The maximum transport speed for consumer DV tapes and DVCAM tapes is 32 times the normal tape speed.
- The maximum time for the STILL TIMER when consumer DV tapes or DVCAM tapes are used is set to 10 seconds, and the total STEP FWD time when the machine has been left standing in the STILL status is set to 1 minute.
- Slow-motion playback of consumer DV tapes and DVCAM tapes is not possible.
- In order to protect your tapes, it is recommended that repeated cue-up in the same location on a consumer DV tape or DVCAM tape be avoided as far as possible.
- Finally, check out the cautionary items for setup menu item No. 108 "FORMAT SEL".

When recording/playback using 1 unit

Set the CONTROL switch on the front panel to LOCAL.



Set the POWER switch to ON.



Set the VIDEO IN switch to the following position:

- "DIGITAL" for serial component digital video signal input.
- Set the VIDEO IN to ANALOG and select as following for the analog input:
 - "Y PB PR" for analog component video signal input.
 - "CMPST" for analog composite video signal input.
 - "S-VIDEO" for S-VIDEO signal input.

Set the CONTROL switch to LOCAL.

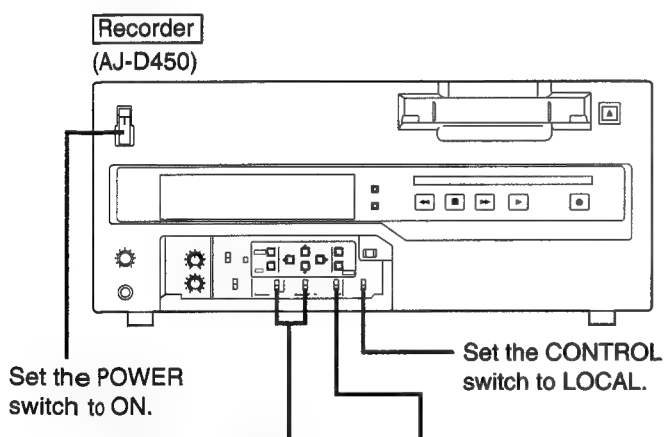
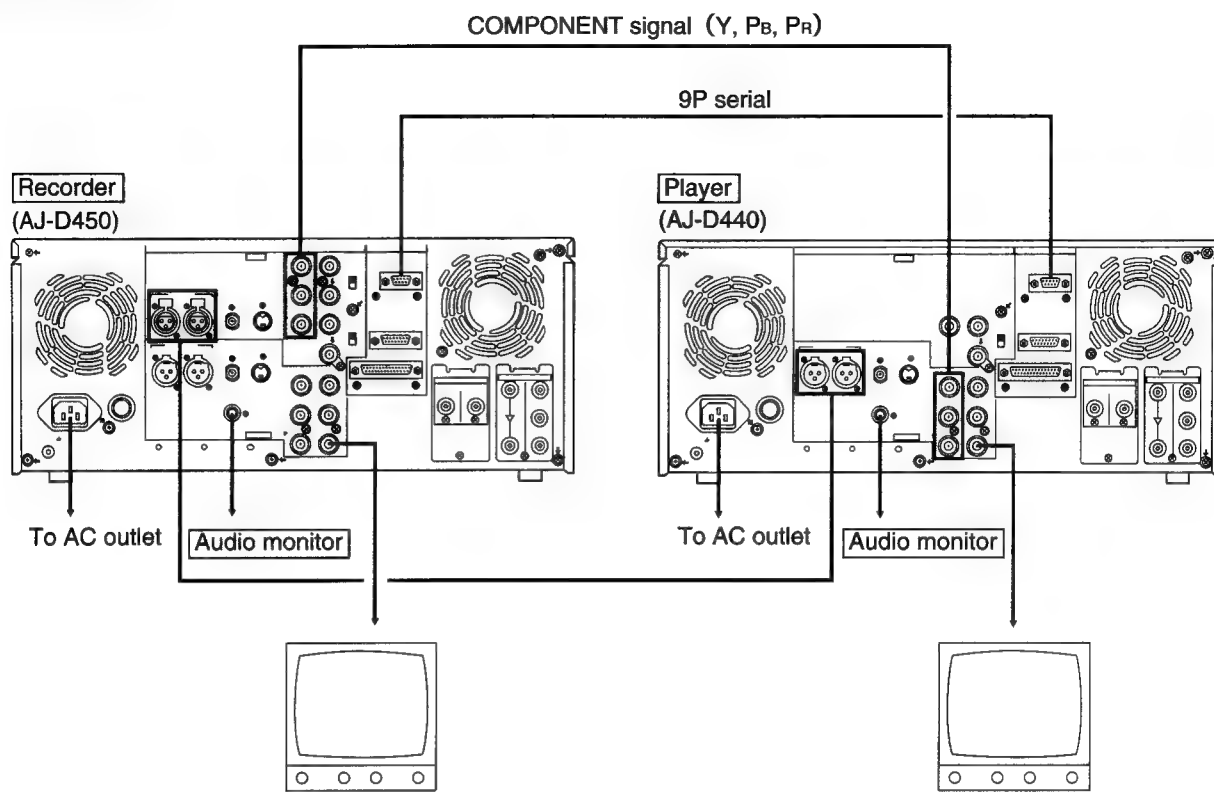
Set the AUDIO IN switch to the following position:

- "DIGITAL" for serial component digital audio signal input.
- "AES/EBU" for digital audio signal input.
- "ANALOG" for analog audio signal input.*

* Applicable only to AJ-D450.

When recording, playback & editing with 2 units (deck to deck)

The CONTROL switch on the recorder must be set to the LOCAL position, and the CONTROL switch on the player must be set to the REMOTE position.

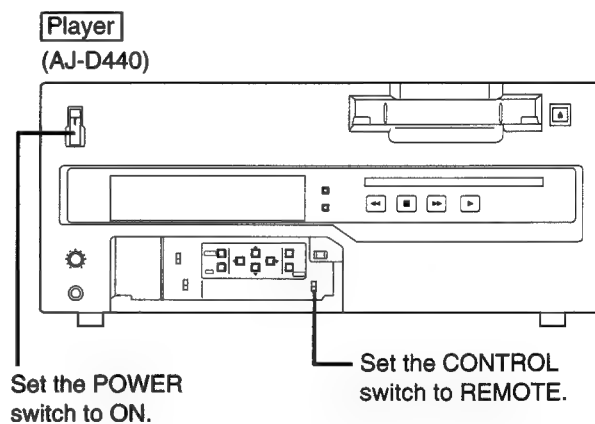


Set the VIDEO IN switch to the following position:

- "SERIAL I/F" for serial component digital video signal input.*
- "Y PB PR" for analog component video signal input.
- "CMPST" for analog composite video signal input.

Set the AUDIO IN switch to the following position:

- "SERIAL I/F" for serial component digital audio signal input.
- "AES/EBU" for digital audio signal input.
- "ANALOG" for analog audio signal input.

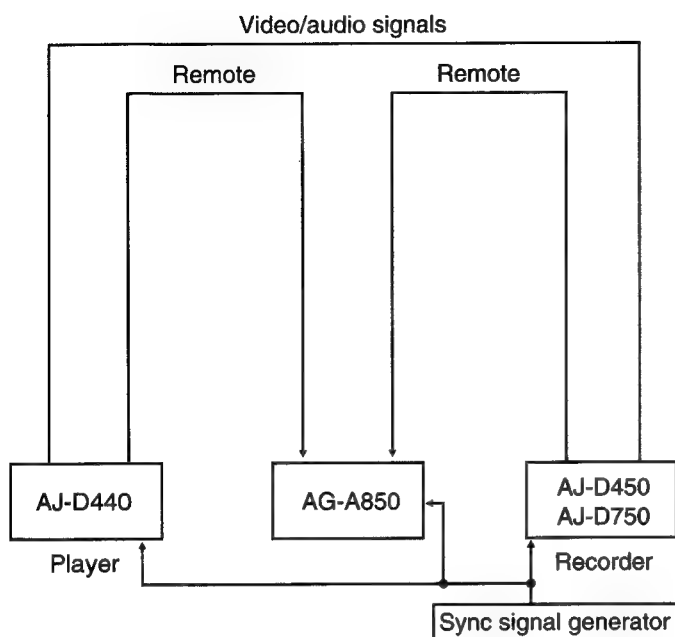


Set the POWER switch to ON.

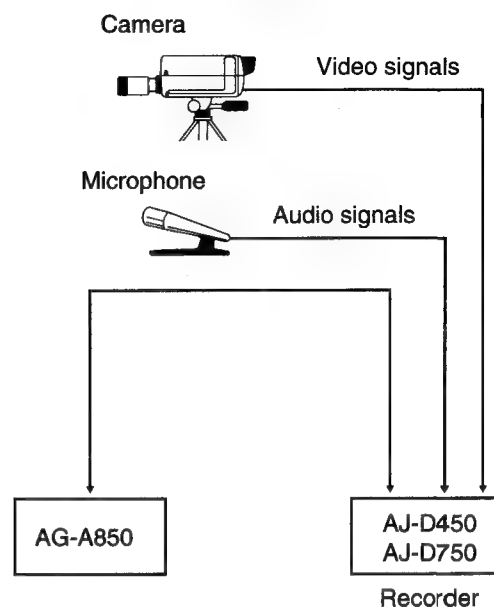
Set the CONTROL switch to REMOTE.

When using an editing controller

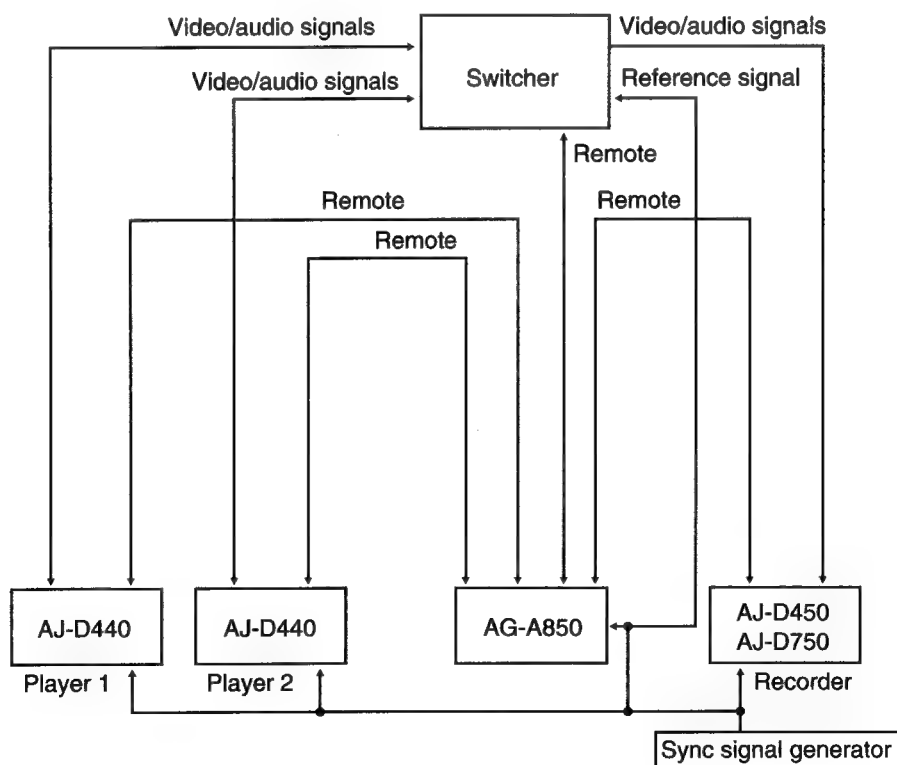
Basic system



Camera/external input editing



System using two players (AB roll editing)

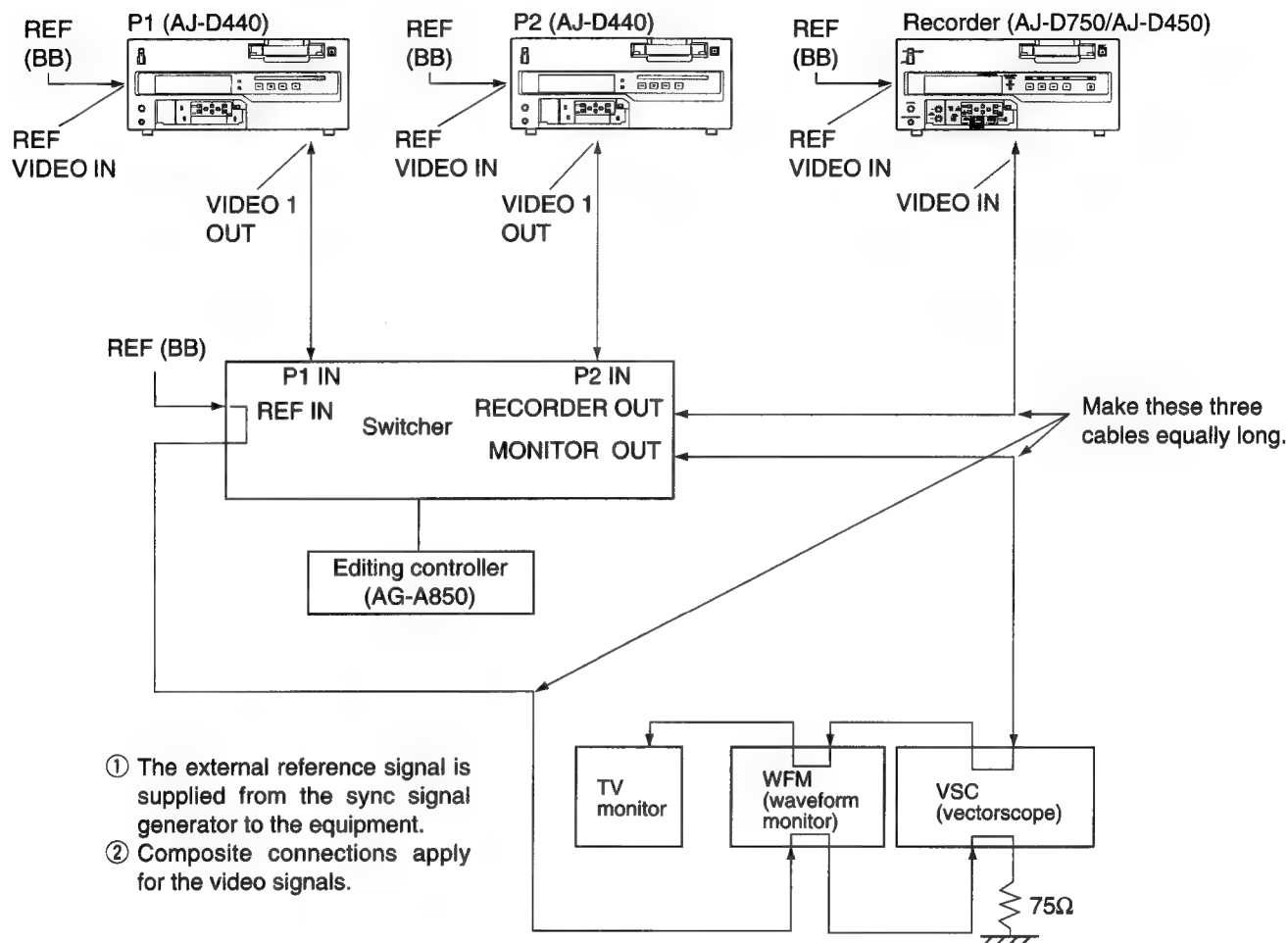


For further details, refer to the Operating Instructions of the AG-A850 editing controller (optional accessory).

Internal encoder adjustments

In order to ensure error-free and accurate editing during AB roll editing (a method of editing using two source VTRs) using an editor, the ENCODER OUT controls must be adjusted after the system has been connected. (These controls must be re-adjusted each time the connecting cables are replaced or the connections are changed.)

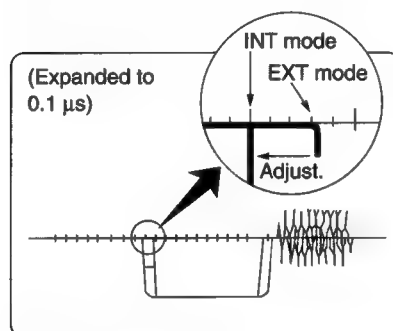
Connect the equipment as shown in the figure below.



If a waveform monitor and vectorscope are not available, correct any color shifting while actually monitoring the picture on the TV monitor.

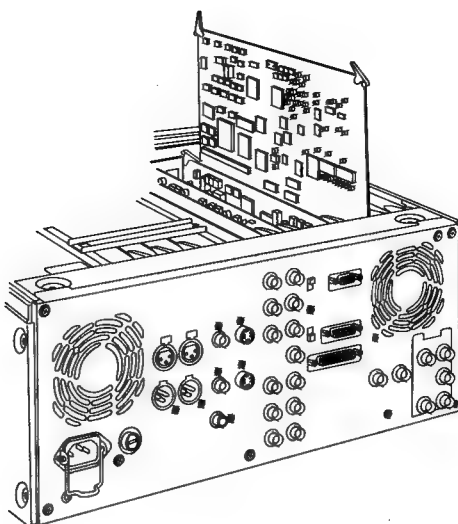
-
- 1** Check the connections. (see previous page.)
 - 2** Select [OFF] on ENCODER SEL at the set up menu. (See page 30.)
Select [ON] to operate the internal encoder externally.
 - 3** Adjust the SYSTEM PHASE.
 - 3-1** On the P1 VTR, play back a cassette tape on which standard color bar signals have been recorded.
 - 3-2** Adjust P1 VTR SYS PHASE.
Adjust the controls to the following with the waveform monitor (WFM).
 - 1) Expand WFM 0.1 μ s on the INT mode.
 - 2) Check the H SYNC position.
 - 3) In this status, select EXT mode for the WFM.
 - 4) In EXT mode, adjust the SYSTEM PHASE to H, SC COARSE, SC FINE, in this order, at the set up menu to set H SYNC to its previous position.

■Waveform on waveform monitor



- 4** Adjust the connected P2 VTR in the same way.

Printed circuit board



Printed circuit board	Abbr. name	Full name	Function	Factory setting
F8 board ADDA-CUE*	SW1	Audio Input Impedance SW	This sets the CH1 audio input impedance. HIGH/600Ω	HIGH
	SW61	Audio Input Impedance SW	This sets the CH2 audio input impedance. HIGH/600Ω	HIGH
F4 board	SW400	Component P _B /P _R Output level selector	This sets the component P _B /P _R output level when connecting with the editor. MII : MII level BETA : β-CAM level	BETA

<Note>

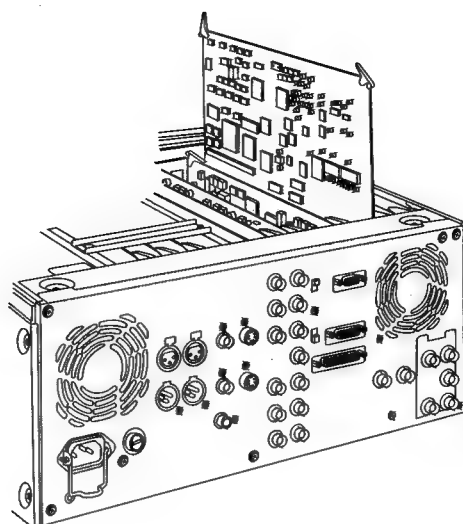
Component P_B/P_R input levels are selected at No. 600 in the setup menu.*

CAUTION:

TO REDUCE THE RISK OF FIRE OF SHOCK HAZARD, REFER CHANGE OF SWITCH SETTING INSIDE THE UNIT TO AUTHORIZED SERVICE PERSONNEL.

* Applicable only to AJ-D450.

Printed circuit board



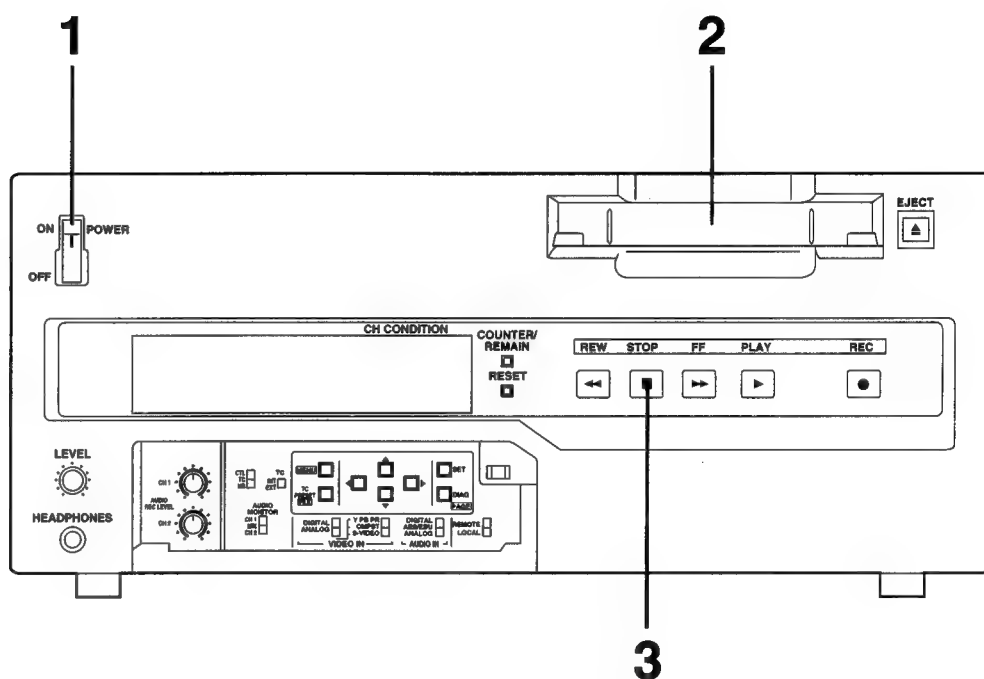
Printed circuit board	Abbr. name	Full name	Function	Factory setting
F8 board ADDA- CUE	SW1	Audio Input Impedance SW	This sets the CH1 audio input impedance. HIGH/600Ω	HIGH
	SW61	Audio Input Impedance SW	This sets the CH2 audio input impedance. HIGH/600Ω	HIGH

CAUTION:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, REFER CHANGE OF SWITCH SETTING INSIDE THE UNIT TO AUTHORIZED SERVICE PERSONNEL.

Switching on the power/inserting the cassette

Before starting to operate the unit, check whether the equipment has been connected properly.

- 1** Turn on the power.
Check that the error indicator is not displayed on the counter.
- 2** Insert the cassette tape.
Insert the tape at its proper position without force. (See page 14.)
- 3** Check that the STOP lamp is on.
When the tape is inserted, the drum rotates automatically, the tape is loaded and the unit goes into the stop mode.



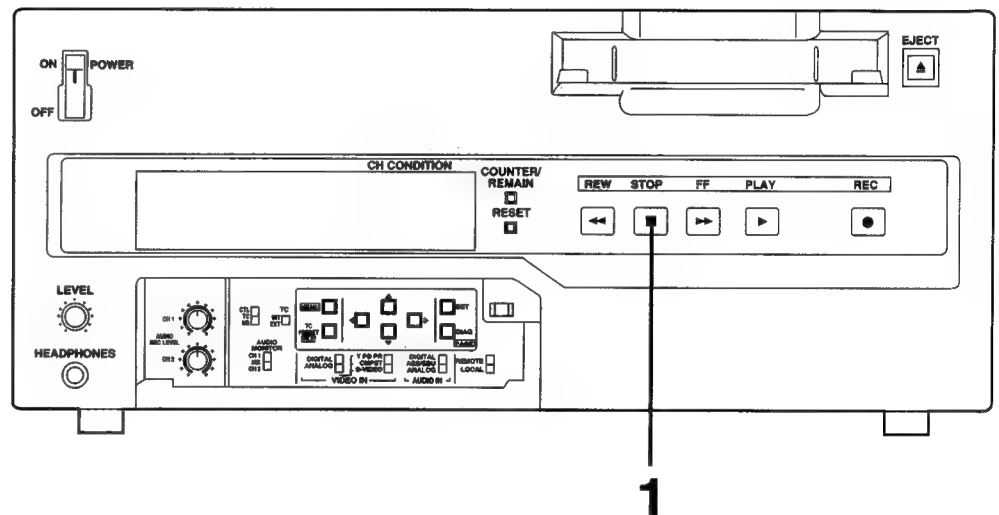
STOP mode

- 1** When the STOP button is pressed, the unit goes into the stop mode. The STOP lamp lights and the tape stops traveling.
 - In order to protect the tape, the unit goes into the standby OFF mode after the time set by setup menu No. 400 (STILL TIMER) has elapsed. When the STOP, REW, FF or PLAY button is pressed, the unit will go into the appropriate mode.

Still Timer Setting

In order to protect the tape and VTR helical heads, it is recommended that the Still Timer be set for automatic tape protection mode in 30 seconds or under.

Page 37 indicates the settings for menu item 400-Still Timer set. Still Timer settings 4 and below will best protect the tape.



Recording (AJ-D450 only)

- 1** Set the accidental erasure prevention tab on the cassette tape to the "recording" position and insert the tape.
- 2** Press the STOP button to place the unit in the stop mode.
- 3** Check that the REC INHIBIT lamp is off.
- 4** Select the video and audio input signals and adjust their levels.
 - 4-1 Selecting video/audio input signals**
 - 1** Connect the signals to be recorded.
 - 2** Select the input signals using the INPUT SELECT switches on the front panel.
 - 4-2 Adjusting the audio level**

Adjust the audio input signal levels of the analog audio CH1/CH2 signals. When set at the center position, audio signals will be recorded at the proper level.
- 5** Press the PLAY button while holding down the REC button. The REC and PLAY lamps light, and recording commences.
- 6** To end the recording, press the STOP button.

Recording is ended, and the unit goes into the stop mode.

<Notes>

- Check that the SERVO lamp is lighted during recording. If it flashes or if it is off, the images played back will be disturbed.
- The sound and pictures to be recorded are offset from the playback pictures by 5 frames and recorded. When, for instance, recording sound at a particular timing while the playback pictures are monitored, the sound to be edited will be recorded at a position which is offset from the playback pictures by 5 frames.

Playback

- 1** Insert the cassette tape, and place the unit in the stop mode.
- 2** Press the PLAY button.
Regular playback is now commenced.
- 3** To end playback, press the STOP button.
The VTR now goes into the stop mode.









<Note>

Check that the SERVO lamp is lighted during playback. If it flashes or if it is off, the images played back will be disturbed.

Setup (default settings)

The unit's major settings are performed by making selections on menus. The setting menus appear on the TV monitor when the TV monitor and VIDEO OUT 3 connector in the unit's connector area are hooked up.

Changing the settings

- 1** Press the MENU button.
The setup menu appears on the TV monitor and setup menu No. appears on the counter display. (If the setup has already been performed, the screen showing the changes made last will appear.)
- 2** Press the cursor buttons (, ) and select the item to be set.
The cursor (*) on the menu screen moves and the item No. on the display flashes.
 - When the  button is pressed, the item No. is incremented for 001 → 002 → 003 → 004 → and so on; when the  button is pressed, the item No. is decremented.
- 3** Press the cursor buttons (, ) at the position where the change is to be made.
The menu screen and display setting No. now flashes.
When the  button is pressed, the setting No. is incremented; when the  button is pressed, it is decremented.
- 4** Repeat steps 2 and 3 to change other items.
- 5** Press the SET button.
The changes are now stored in the memory.
 - To return the items to the settings established before the changes were made, press the MENU button without pressing the SET button.

To return the setup settings to the factory (initial) settings, press the RESET button while the menu is displayed.

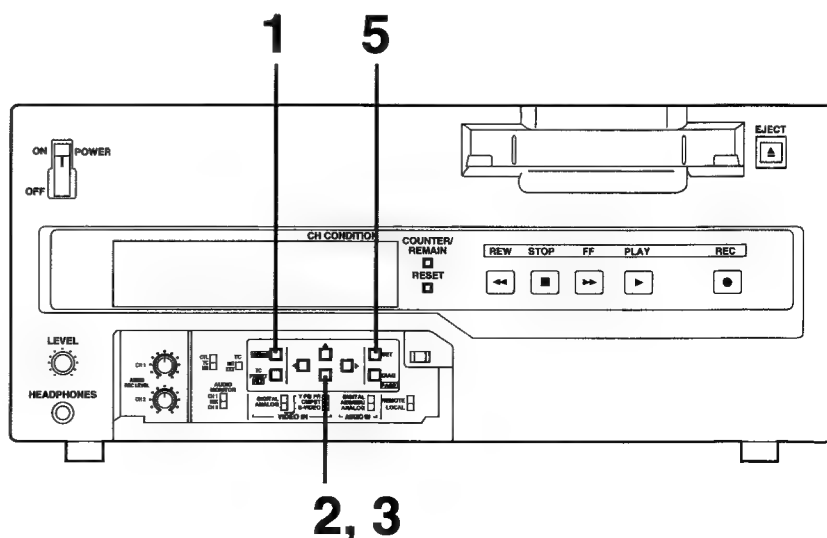
The following message is displayed.

SETUP-MENU INIT SET
YES<PLAY>/NO<STOP>

When the PLAY button is pressed, the factory settings are restored.

<Notes>



- When the RESET button is pressed to return to the factory settings, the factory settings are restored only for the user file currently being used and other user files are not affected.
- The changed SYSTEM menu contents are stored in the memory even if the MENU button is pressed.

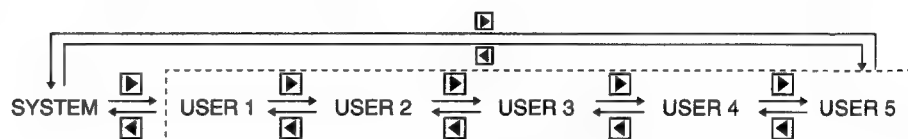


Setup (setting) menus

This unit can store up to 5 user files (user 1 to user 5) containing different menu settings, and these files can be selected and used.

Changing the file

- 1** Press the MENU button.
- 2** Hold down the FILE button and press the cursor button  to switch to the next user file.
Hold down the FILE button and press the cursor button  to switch to the previous user file.



USER FILE

Each user file contains the following items.

- BASIC
- OPERATION
- INTERFACE
- EDIT
- TAPE PROTECT
- TIME CODE
- VIDEO
- AUDIO
- MENU

- 3** Repeat the operation in step 2 to select the user file to be used and press the SET button. The user file is changed and stored in the memory.

<Note>

SYSTEM menu items are not included in user files 1 to 5.

Therefore, after selecting the user file, switch to the SYSTEM file and set the SYSTEM menu items.

Setup menus

Lock mode can be set to protect the settings in the system files and user files (USER2 – USER5). Settings can no longer be changed when this mode is set.

To set and release the lock mode for the system files and user files use setup item No. 30 (MENU LOCK) and setup menu item No. A03 (MENU LOCK), respectively.

Setting and releasing the lock mode.

- 1** Press the MENU button.
- 2** While holding down the FILE button, press the ◀ or ▶ button, and select the file for which the lock mode is to be set or released.
- 3** Press the ▲ or ▼ button and move the cursor (*) on the menu screen to setup item No. 30 (MENU LOCK) or setup menu item No. A03 (MENU LOCK) for the system or user file.
To set the lock: Select the 0001 (ON) setting.
To release the lock: Select the 0000 (OFF) setting.
- 4** Press the ◀ or ▶ button, and select lock mode setting or release.

When the lock has been set, "LOCKED" flashes on the menu screen. In addition, the counter display stops flashing and lights.

SETUP-MENU		
<USER2>	NO.000	- 0005
*000	P-ROLL TIME	5s
001	CHARA H-POS	5
002	CHARA V-POS	23
003	DISPLAY SEL	T&STA
004	LOCAL ENA	ST&EJ
005	TAPE TIMER	±12h
006	SUPER	ON
007	CHARA TYPE	WHITE
101	SHTL MAX	X32

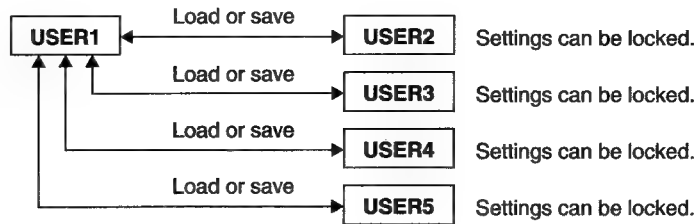
- 5** Press the SET button. The setting is now stored in the memory.

<Notes>

- The lock mode cannot be set for the USER1 file settings.
- Even if the RESET button is pressed, the files which has been set to the lock mode cannot be reset to the factory settings.

Setup menus

The contents of the USER2 – USER5 files can be copied (loaded) into the USER1 file. In addition, the contents of the USER1 file can be copied (saved) to the USER2 – USER5 files.



Loading a user file

- 1** Press the MENU button.
- 2** While holding down the FILE button, press the ◀ or ▶ button, and select USER1.
- 3** Press the ▲ or ▼ button and move the cursor (*) on the menu screen to setup item No. A00 (LOAD).

```

SETUP-MENU  MENU
<USER1>    NO.A00 - 0000
725 CUE SLOW      STEP
*A00 LOAD          USER2
A01 SAVE          USER2
A02 P.ON LOAD      OFF
END
  
```

- 4** Press the ◀ or ▶ button and select the user file whose contents are to be loaded into USER1.
- 5** Press the SET button. The following messages appear on the menu screen and counter display.

Menu screen

```

SETUP-MENU LOAD

USER█ → USER1 OK?
YES<PLAY>/NO<STOP>
  
```

Counter display

```

L U█ -U1
  
```

The user file number selected in step 4 is displayed in the shaded area.

- 6** Press the PLAY button. The settings of the user file selected in step 4 are loaded, and the USER1 menu display appears. When the STOP button is pressed, the USER1 menu display appears while the settings remain unchanged.
- 7** Press the ▲ or ▼ button and move the cursor (*) on the menu screen to any setup item except No. A00 (LOAD) and No. A01 (SAVE).
- 8** Press the SET button. The USER1 settings are now stored in the memory. If the USER1 settings are not going to be stored in the memory, do not press the SET button but press the MENU button.

Saving a user file

- 1** Press the MENU button.
- 2** While holding down the FILE button, press the ◀ or ▶ button, and select USER1.
- 3** Press the ▲ or ▼ button and move the cursor (*) on the menu screen to setup item No. A01 (SAVE).

SETUP-MENU	MENU
<USER1>	NO.A00 - 0000
723 DV PB ATT	OFF
A00 LOAD	USER2
*A01 SAVE	USER2
A02 P.ON LOAD	OFF
END	

- 4** Press the ◀ or ▶ button and select the user file into which the USER1 contents are to be saved. User files which have been set to the lock mode are not displayed. When all the user files have been set to the lock mode, the "LOCKED" display appears and the contents cannot be saved.
- 5** Press the SET button. The following messages appear on the menu screen and counter display.

Menu screen

SETUP-MENU SAVE
USER1 → USER█ OK?
YES<PLAY>/NO<STOP>

Counter display

S U1 -U█

The user file number selected in step 4 is displayed in the shaded area.

- 6** Press the PLAY button. The contents of the USER1 file are saved in the user file which was selected in step 4 and stored in the memory. When the STOP button is pressed, the USER1 menu display appears while the settings remain unchanged.
- 7** Press the ▲ or ▼ button and move the cursor (*) on the menu screen to any setup item except No. A00 (LOAD) and No. A01 (SAVE).
- 8** Press the SET button. The USER1 settings are now stored in the memory. If the USER1 settings are not going to be stored in the memory, do not press the SET button but press the MENU button.

Automatic loading of user file when the power is turned on

When the user file to be loaded is selected in advance using setup menu item No. A02 (P.ON LOAD), it can be automatically loaded into USER1 when the power is turned on.

Setup (setting) menus

SYSTEM menu

<SYSTEM>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
00	SYS SC COAR.	<u>0000</u> 0001 0002 0003	<u>0</u> 90 180 270	System phase rough adjustment: 90° units <Note> If setting operation is performed, the setting value does not return to factory (default) setting.
01	SYS SC FINE	0000 : <u>0127</u> : 0255	<u>-127</u> : <u>0</u> : 127	System phase fine adjustment: Total variable range: ±90° or more -: advanced +: delayed <Note> If setting operation is performed, the setting value does not return to factory (default) setting.
02	SYS H	0000 : <u>0112</u> : 0224	<u>-112</u> : <u>0</u> : 112	System phase adjustment: ±2 μsec (SC cycle phase) -: Advanced +: Delayed <Note> If setting operation is performed, the setting value does not return to factory (default) setting.
03	ENCODER SEL	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether the ENCODER connector functions. 0: Does not functions. 1: Functions.
10	AV PHASE	0000 : <u>0128</u> : 0255	<u>-128</u> : <u>0</u> : 127	This adjusts the audio output phase with respect to the video output: 20.8 μs steps -: The audio output phase is advanced with respect to the video output. +: The audio output phase is delayed with respect to the video output.
30	MENU LOCK	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether the system file lock mode is to be engaged or released. 0: The lock is released (file data can be changed). 1: The lock is engaged (file data cannot be changed).

The underline on the setting item denotes the initial setting.

USER menu

<BASIC>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
000	P-ROLL TIME	0000 : <u>0005</u> : 0015	<u>0S</u> : <u>5S</u> : 15S	This sets the preroll time which can be set from 0 to 15 seconds in 1-second increments. <Note> In the case of AJ-D450, the unit will not operate if the preroll time is set to 0 seconds when the unit is set to automatic editing (PREVIEW, AUTO EDIT COMMAND) from an external controller.

The underline on the setting item denotes the initial setting.

Setup menus

USER menu

<BASIC> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
001	CHARA H-POS	0000 : 0005 : 0012	0 : 5 : 12	This sets the position of the characters on the horizontal plane for the time code and other super displays output to the VIDEO OUT 3 connector. <Notes> 1. When setting this item, the DISPLAY SEL status is output to VIDEO OUT 3 even if SUPER OFF has been set. However, when the menu is exited, operation complies with the SUPER OFF/ON setting. Also, CHARA TYPE is output to VIDEO OUT 3 according to the status set in the menu. 2. When the DISPLAY SEL setting causes characters to extend beyond the edges of the screen, the setting value is changed so that the characters are automatically displayed in a position on the screen.
002	CHARA V-POS	0000 : 0018 : 0022	0 : 18 : 22	This sets the position of the characters on the vertical plane for the time code and other super displays output to the VIDEO OUT 3 connector. <Notes> 1. When setting this item, the DISPLAY SEL status is output to VIDEO OUT 3 even if SUPER OFF has been set. However, when the menu is exited, operation complies with the SUPER OFF/ON setting. Also, CHARA TYPE is output to VIDEO OUT 3 according to the status set in the menu. 2. When the DISPLAY SEL setting causes characters to extend beyond the edges of the screen, the setting value is changed so that the characters are automatically displayed in a position on the screen.
003	DISPLAY SEL	0000 0001 0002	TIME T&STA T&S&M	This selects what information is to be provided by the time code and other super displays output to the VIDEO OUT 3 connector. 0: Time only. 1: Time and status. 2: Time, status and mode. <Notes> • When T&S&M has been selected, one of the following displays appears on the third line of the superimposed display. In the DVCPRO mode: DVCPRO MODE In the DV mode: DV MODE In the DVCAM mode: DVCAM MODE • An error message is displayed when an warning or error occurs.
004	LOCAL ENA	0000 0001 0002	DIS ST&EJ ENA	This selects the buttons which can be operated on the front panel when the REMOTE/LOCAL switch has been set to REMOTE. 0: No buttons can be operated. 1: Only the STOP and EJECT buttons can be operated. 2: All buttons can be operated.
005	TAPE TIMER	0000 0001	±12h 24h	This selects the 12 or 24 hour display for the CTL counter. 0: 12 hour display 1: 24 hour display
006	SUPER	0000 0001	OFF ON	This selects whether the time code and other super display which are output to the VIDEO OUT 3 connector is to shown. 0: Not shown. 1: Shown.
007	CHARA TYPE	0000 0001	WHITE W/OUT	This selects the display type for the super display output to the VIDEO OUT 3 connector as well as for displays such as the setting menu, etc. 0: White characters against a black background. 1: White characters with a black border.

The underline on the setting item denotes the initial setting.

Setup menus

USER menu

<BASIC> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
001	CHARA H-POS	0000 : <u>0005</u> : 0012	0 : <u>5</u> : 12	This sets the position of the characters on the horizontal plane for the time code and other super displays output to the VIDEO OUT 3 connector. <Notes> 1. When setting this item, the DISPLAY SEL status is output to VIDEO OUT 3 even if SUPER OFF has been set. However, when the menu is exited, operation complies with the SUPER OFF/ON setting. Also, CHARA TYPE is output to VIDEO OUT 3 according to the status set in the menu. 2. When the DISPLAY SEL setting causes characters to extend beyond the edges of the screen, the setting value is changed so that the characters are automatically displayed in a position on the screen.
002	CHARA V-POS	0000 : <u>0023</u> : 0028	0 : <u>23</u> : 28	This sets the position of the characters on the vertical plane for the time code and other super displays output to the VIDEO OUT 3 connector. <Notes> 1. When setting this item, the DISPLAY SEL status is output to VIDEO OUT 3 even if SUPER OFF has been set. However, when the menu is exited, operation complies with the SUPER OFF/ON setting. Also, CHARA TYPE is output to VIDEO OUT 3 according to the status set in the menu. 2. When the DISPLAY SEL setting causes characters to extend beyond the edges of the screen, the setting value is changed so that the characters are automatically displayed in a position on the screen.
003	DISPLAY SEL	0000 <u>0001</u> 0002	TIME <u>T&STA</u> T&S&M	This selects what information is to be provided by the time code and other super displays output to the VIDEO OUT 3 connector. 0: Time only. 1: Time and status. 2: Time, status and mode. <Notes> • When T&S&M has been selected, one of the following displays appears on the third line of the superimposed display. In the DVCPRO mode: DVCPRO MODE In the DV mode: DV MODE In the DVCAM mode: DVCAM MODE • An error message is displayed when an warning or error occurs.
004	LOCAL ENA	0000 <u>0001</u> 0002	DIS <u>ST&EJ</u> ENA	This selects the buttons which can be operated on the front panel when the REMOTE/LOCAL switch has been set to REMOTE. 0: No buttons can be operated. 1: Only the STOP and EJECT buttons can be operated. 2: All buttons can be operated.
005	TAPE TIMER	<u>0000</u> 0001	<u>±12h</u> 24h	This selects the 12 or 24 hour display for the CTL counter. 0: 12 hour display 1: 24 hour display
006	SUPER	0000 <u>0001</u>	OFF <u>ON</u>	This selects whether the time code and other super display which are output to the VIDEO OUT 3 connector is to shown. 0: Not shown. 1: Shown.
007	CHARA TYPE	<u>0000</u> 0001	<u>WHITE</u> W/OUT	This selects the display type for the super display output to the VIDEO OUT 3 connector as well as for displays such as the setting menu, etc. 0: White characters against a black background. 1: White characters with a black border.

The underline on the setting item denotes the initial setting.

Setup menus

USER menu

<OPERATION>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
101	SHTL MAX	<u>0000</u> 0001 0002	$\times 16$ $\times 32$ $\times 60$	This sets the maximum speed for shuttle operations. 0: $16\times$ normal speed 1: $32\times$ normal speed 2: $60\times$ normal speed <Note> During DV or DVCAM format, the maximum speed is $32\times$ normal speed even when $60\times$ is selected.
102	FF. REW MAX	<u>0000</u> 0001 0002	$\times 32$ $\times 60$ $\times 100$	This sets the maximum speed for FF and REW operations. 0: $32\times$ normal speed 1: $60\times$ normal speed 2: $100\times$ normal speed <Note> During DV or DVCAM format, the maximum speed is $32\times$ normal speed regardless of this setting.
103	AUDIO MUTE	<u>0000</u> 0001	OFF ON	This sets the status until the audio signal is output when operation switches from the stop or search modes to the play mode. 0: The time until the audio is output is shortened. 1: The audio is output after the status stabilizes. <Note> When set to 0 (OFF), the sound in the initially output part is incomplete. Therefore, this setting is not recommended for broadcasts.
104	REF ALARM	<u>0000</u> 0001	OFF ON	This selects whether to warn the operator when the REF.VIDEO signal has not been connected. 0: Warning is not given. 1: Warning is given by the flashing STOP lamp.
106	PLAY DELAY	<u>0000</u> : 0015	0 : 15	This set the play delay time in frame increments.
107	CAP. LOCK	<u>0000</u> 0001	2F 4F	This selects the capstan lock mode. 0: 2F mode 1: 4F mode
108	FORMAT SEL	<u>0000</u> 0001 0002	DVCPRO DV DVCAM	These settings are for selecting the format when an L cassette or S cassette is used. 0: L cassette \rightarrow DVCPRO mode S cassette \rightarrow DV mode 1: L cassette/S cassette \rightarrow DV mode 2: L cassette/S cassette \rightarrow DVCAM mode <Notes> Bear in mind that, in addition to problems with playback, the trouble described below may occur when a tape which does not match the selected format is inserted. 1. If a DV or DVCAM tape is inserted when the DVCPRO mode setting has been selected, the recording operation will be conducted but no guarantee is given for the resulting performance, etc. Conversely, recording is not possible if a DVCPRO cassette tape is inserted when the DV or DVCAM mode setting has been selected. 2. The REMAIN display fails to appear properly. 3. The slow-down position near the tape start or end is not located accurately. 4. When a tape which does not match the selected format is inserted, no guarantee is given for the resulting performance, etc.

The underline on the setting item denotes the initial setting.

USER menu

<OPERATION>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
101	SHTL MAX	<u>0000</u> 0001 0002	×16 ×32 ×60	This sets the maximum speed for shuttle operations. 0: 16× normal speed 1: 32× normal speed 2: 60× normal speed <Note> During DV or DVCAM format, the maximum speed is 32× normal speed even when 60× is selected.
102	FF. REW MAX	<u>0000</u> 0001 0002	×32 ×60 ×100	This sets the maximum speed for FF and REW operations. 0: 32× normal speed 1: 60× normal speed 2: 100× normal speed <Note> During DV or DVCAM format, the maximum speed is 32× normal speed regardless of this setting.
103	AUDIO MUTE	<u>0000</u> 0001	OFF ON	This sets the status until the audio signal is output when operation switches from the stop or search modes to the play mode. 0: The time until the audio is output is shortened. 1: The audio is output after the status stabilizes. <Note> When set to 0 (OFF), the sound in the initially output part is incomplete. Therefore, this setting is not recommended for broadcasts.
104	REF ALARM	<u>0000</u> 0001	OFF ON	This selects whether to warn the operator when the REF. VIDEO signal has not been connected. 0: Warning is not given. 1: Warning is given by the flashing STOP lamp.
106	PLAY DELAY	<u>0000</u> : 0015	0 : 15	This set the play delay time in frame increments.
107	CAP. LOCK	<u>0000</u> 0001 0002	2F 4F 8F	This selects the capstan lock mode. 0: 2F mode 1: 4F mode 2: 8F mode
108	FORMAT SEL	<u>0000</u> 0001 0002	DVCPRO DV DVCAM	These settings are for selecting the format when an L cassette or S cassette is used. 0: L cassette → DVCPRO mode S cassette → DV mode 1: L cassette/S cassette → DV mode 2: L cassette/S cassette → DVCAM mode <Notes> Bear in mind that, in addition to problems with playback, the trouble described below may occur when a tape which does not match the selected format is inserted. 1. If a DV or DVCAM tape is inserted when the DVCPRO mode setting has been selected, the recording operation will be conducted but no guarantee is given for the resulting performance, etc. Conversely, recording is not possible if a DVCPRO cassette tape is inserted when the DV or DVCAM mode setting has been selected. 2. The REMAIN display fails to appear properly. 3. The slow-down position near the tape start or end is not located accurately. 4. When a tape which does not match the selected format is inserted, no guarantee is given for the resulting performance, etc.

The underline on the setting item denotes the initial setting.

USER menu

<OPERATION> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
109*	EJECT EE SEL	<u>0000</u> 0001	— EE BLACK	This selects whether EE mode or BLACK is to be used during EJECT status. 0: EE mode 1: Video blackens, audio mutes.
110*	F/R EE SEL	<u>0000</u> 0001	— EE TAPE	This selects whether EE mode or playback mode is to be used during FF/REW operations. 0: EE mode 1: Playback mode
111*	STOP EE SEL	<u>0000</u> 0001	— EE TAPE	This selects whether EE mode or playback mode is to be used during stop mode. 0: EE mode 1: Playback mode <Note> The STAND-BY OFF mode complies with the above selection. When TAPE is selected, however, the video becomes grey.
112	AUTO REW	<u>0000</u> 0001	— OFF ON	This selects whether to rewind the tape automatically to the tape start when the tape end is detected. 0: The tape stops at the tape end. 1: The tape is rewound to the tape start.
113	MEMORY STOP	<u>0000</u> 0001	— OFF ON	This selects whether the VTR is to stop automatically when the counter value reaches "0" during a fast forwarding or rewinding operation in the CTL mode. 0: The VTR does not stop. 1: The VTR stops automatically. <Notes> 1. The stop mode concerned is either the stop or the still-picture (SHTL STILL) mode depending on the setup menu No. 313 (AFTER CUE-UP) setting. 2. When both the AUTO REW function and MEMORY function have been selected at the same time, the AUTO REW function takes precedence.
114*	REC INHIBIT	<u>0000</u> 0001	— OFF ON	This selects whether to allow (enable) or prohibit (disable) the recording of signals on the cassette tape. 0: Signals can be recorded on the cassette tape when the cassette's accidental erasure prevention mechanism is set to the recording enable position. 1: Recording on the cassette tape is prohibited. In this case, the REC INH lamp on the front panel lights.
115	STOP RESPNS	<u>0000</u> 0001	NORMAL — QUICK	This selects the response when the mode is changed to STOP/STILL while the tape is traveling. 0: Priority is given to the output picture. 1: Priority is given to the response. <Notes> • At the 1 (QUICK) setting, the picture may not be as clear in the STOP/STILL mode as it would be at the 0 (NORMAL) setting. • CTL may shift by ± 2 frames.

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

Setup menus

USER menu

<INTERFACE>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
201	9P SEL	<u>0000</u> 0001	OFF ON	This selects whether the 9P connector functions when the REMOTE/LOCAL switch has been set to REMOTE. 0: Do not function 1: Function
202	ID SEL	<u>0000</u> 0001	OTHER DVCPRO	This selects the ID information which is returned to the controller. 0: 20 25H 1: DVCPRO's, own ID is returned (F0 33H).
204	RS232C SEL	<u>0000</u> 0001	OFF ON	These settings are for selecting whether the RS-232C connector is to function when the REMOTE/LOCAL switch is set to REMOTE. 0: Connector does not function. 1: Connector functions.
205	BAUD RATE	0000 0001 0002 0003 0004 <u>0005</u>	300 600 1200 2400 4800 9600	These settings are for selecting the RS-232C communication speed (baud rate).
206	DATA LENGTH	<u>0000</u> 0001	7 8	These settings are for selecting the RS-232C data length. (Unit: bit)
207	STOP BIT	<u>0000</u> 0001	1 2	These settings are for selecting the RS-232C stop bit length. (Unit: bit)
208	PARITY	<u>0000</u> 0001 0002	NON ODD EVEN	These settings are for selecting the none, odd or even for the RS-232C parity bit. 0: Parity bit is not used. 1: An odd number of bits is used for the parity system. 2: An even number of bits is used for the parity system.
209	RETURN ACK	<u>0000</u> 0001	OFF ON	These settings are for selecting whether the ACK code is to be returned when a command is received from RS-232C. 0: ACK code is not returned. 1: ACK code is returned.

The underline on the setting item denotes the initial setting.

USER menu

<INTERFACE>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
201	9P SEL	<u>0000</u> 0001	OFF ON	This selects whether the 9P connector functions when the REMOTE/LOCAL switch has been set to REMOTE. 0: Do not function 1: Function
202	ID SEL	<u>0000</u> 0001	OTHER DVCPRO	This selects the ID information which is returned to the controller. 0: 21 25H 1: DVCPRO's, own ID is returned (F1 33H).
204	RS232C SEL	<u>0000</u> 0001	OFF ON	These settings are for selecting whether the RS-232C connector is to function when the REMOTE/LOCAL switch is set to REMOTE. 0: Connector does not function. 1: Connector functions.
205	BAUD RATE	<u>0000</u> 0001 0002 0003 0004 0005	300 600 1200 2400 4800 9600	These settings are for selecting the RS-232C communication speed (baud rate).
206	DATA LENGTH	<u>0000</u> 0001	7 8	These settings are for selecting the RS-232C data length. (Unit: bit)
207	STOP BIT	<u>0000</u> 0001	1 2	These settings are for selecting the RS-232C stop bit length. (Unit: bit)
208	PARITY	<u>0000</u> 0001 0002	NON ODD EVEN	These settings are for selecting the none, odd or even for the RS-232C parity bit. 0: Parity bit is not used. 1: An odd number of bits is used for the parity system. 2: An even number of bits is used for the parity system.
209	RETURN ACK	<u>0000</u> 0001	OFF ON	These settings are for selecting whether the ACK code is to be returned when a command is received from RS-232C. 0: ACK code is not returned. 1: ACK code is returned.

The underline on the setting item denotes the initial setting.

USER menu

<EDIT>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
303*	STD/ NON-STD	<u>0000</u> 0001 0002	<u>AUTO</u> STD N-STD	This selects STD or NON-STD in accordance with the composite input signal. 0: Standard/non-standard signals are automatically identified and processed. 1: Standard signals are processed. (Forced STD) 2: Non-standard signals are processed. (Forced NON-STD)
304*	SERVO REF	<u>0000</u> 0001	<u>AUTO</u> EXT	This selects the video signal processing. 0: Servo is synchronized with the input signal during recording and editing, or with the REF signal during playback. 1: Servo is synchronized at all times with the REF signal.
305*	EDIT RPLCE1	<u>0000</u> <u>0001</u> 0002 0003	<u>N-DEF</u> <u>CH1</u> CH2 CH1+2	This sets the channel assignments for the controller's analog audio preset when editing the digital audio of the VTR using a controller which does not have a digital audio edit preset control function. This selects the channel concerned when the VTR CH1 edit preset is set in compliance with the ON or OFF presetting for the analog audio signals designated by the controller. 0: Not set. 1: Compliance with analog CH1 edit preset. 2: Compliance with analog CH2 edit preset. 3: Compliance with either analog CH1 or CH2 edit preset.
306*	EDIT RPLCE2	<u>0000</u> 0001 <u>0002</u> 0003	<u>N-DEF</u> CH1 <u>CH2</u> CH1+2	This sets the channel assignments for the controller's analog audio preset when editing the digital audio of the VTR using a controller which does not have a digital audio edit preset control function. This selects the channel concerned when the VTR CH2 edit preset is set in compliance with the ON or OFF presetting for the analog audio signals designated by the controller. 0: Not set. 1: Compliance with analog CH1 edit preset. 2: Compliance with analog CH2 edit preset. 3: Compliance with either analog CH1 or CH2 edit preset.
307*	EDIT RPLCEC	<u>0000</u> 0001 0002 0003	<u>N-DEF</u> CH1 CH2 CH1+2	This sets the channel assignments for the controller's analog audio preset when editing the digital audio of the VTR using a controller which does not have a digital audio edit preset control function. This selects the channel concerned when the VTR CUE edit preset is set in compliance with the ON or OFF presetting for the analog audio signals designated by the editor or controller. 0: Not set. 1: Compliance with analog CH1 edit preset. 2: Compliance with analog CH2 edit preset. 3: Compliance with either analog CH1 or CH2 edit preset.
309*	AUD EDIT IN	<u>0000</u> <u>0001</u>	<u>CUT</u> <u>FADE</u>	This selects the connection method for the digital audio edit IN point. 0: Cut processing 1: V Fade processing
310*	AUD EDIT OUT	<u>0000</u> <u>0001</u>	<u>CUT</u> <u>FADE</u>	This selects the connection method for the digital audio edit OUT point. 0: Cut processing 1: V Fade processing

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

Setup menus

USER menu

<EDIT> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
313	AFTER CUE-UP	<u>0000</u> 0001	<u>STOP</u> STILL	This selects the mode after cue-up operation is complete. 0: STOP mode 1: SHTL STILL mode
315*	AUD MEM UNIT	<u>0000</u> 0001 0002 0003	<u>OFF</u> MODE1 MODE2 MODE3	This selects the connection with the AJ-YA752 audio memory unit. 0: When the audio memory unit is not going to be used 1: When a voice-over operation is to be conducted 2: When audio cross channel editing is to be performed for CH2 3: When audio cross channel editing is to be performed for CH1 <Notes> • The RS-232C interface will function only when this menu item is set to 0 (OFF). • Refer to the Instruction Manual of the AJ-YA752 audio memory unit for details on how the modes are used.
316	VAR STEP	<u>0000</u> 0001	<u>FINE</u> COARSE	This selects the VAR speed during remote control operations. 0: The tape is played at the fine step speed. 1: The tape is played at a speed at which noise-less playback is possible in the $-0.43\times$ to $+1\times$ ($-0.5\times$ to $+1\times$) range. <Notes> • The tape will be played at the speed given in parentheses in the DV/DVCAM mode. • At the 1(COARSE) setting, the phase cannot be synchronized from the editing controller.
317	VAR FWD MAX	<u>0000</u> 0001 0002 0003 0004 0005 0006 0007 0008	<u>+4.1</u> +1.85 +1 +0.75 +0.5 +0.3 +0.2 +0.1 +0.03	This sets the maximum VAR FWD speed. 0: $+4.1\times$ ($+3.1\times$) speed 1: $+1.85\times$ ($+1.85\times$) speed 2: $+1\times$ ($+1\times$) speed 3: $+0.75\times$ ($+0.5\times$) speed 4: $+0.5\times$ ($+0.5\times$) speed 5: $+0.3\times$ ($+0.3\times$) speed 6: $+0.2\times$ ($+0.2\times$) speed 7: $+0.1\times$ ($+0.1\times$) speed 8: $+0.03\times$ ($+0.03\times$) speed <Notes> • The tape will be played at the speed given in parentheses in the DV/DVCAM mode. • At any speed setting other than 0 ($+4.1\times$), the phase cannot be synchronized from the editing controller.
318	VAR REV MAX	<u>0000</u> 0001 0002 0003 0004 0005 0006 0007	<u>-4.1</u> -1.85 -1 -0.43 -0.3 -0.2 -0.1 -0.03	This sets the maximum VAR REV speed. 0: $-4.1\times$ ($-3.1\times$) speed 1: $-1.85\times$ ($-1.85\times$) speed 2: $-1\times$ ($-1\times$) speed 3: $-0.43\times$ ($-0.5\times$) speed 4: $-0.3\times$ ($-0.3\times$) speed 5: $-0.2\times$ ($-0.2\times$) speed 6: $-0.1\times$ ($-0.1\times$) speed 7: $-0.03\times$ ($-0.03\times$) speed <Note> The tape will be played at the speed given in parentheses in the DV/DVCAM mode.
319	JOG STEP	<u>0000</u> <u>0001</u>	<u>FINE</u> COARSE	This selects the JOG speed during remote control operations. 0: The tape is played at the fine step speed. 1: The tape is played at a speed at which noise-less playback is possible in the $-0.43\times$ to $+1\times$ ($-0.5\times$ to $+1\times$) range. <Notes> • The tape will be played at the speed given in parentheses in the DV/DVCAM mode. • At the 1(COARSE) setting, the phase cannot be synchronized from an editing controller which synchronizes the phase using the JOG command.

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

USER menu

<EDIT> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
320	JOG FWD MAX	0000 0001 <u>0002</u>	+4.1 +1.85 <u>+1</u>	This sets the maximum JOG FWD speed. 0: $+4.1 \times (+3.1 \times)$ speed 1: $+1.85 \times (+1.85 \times)$ speed 2: $+1 \times (+1 \times)$ speed <Notes> • The tape will be played at the speed given in parentheses in the DV/DVCAM mode. • At any speed setting other than 0 ($+4.1 \times$), the phase cannot be synchronized from an editing controller which synchronizes the phase using the JOG command.
321	JOG REV MAX	0000 0001 0002 <u>0003</u>	-4.1 -1.85 -1 <u>-0.43</u>	This sets the maximum JOG REV speed. 0: $-4.1 \times (-3.1 \times)$ speed 1: $-1.85 \times (-1.85 \times)$ speed 2: $-1 \times (-1 \times)$ speed 3: $-0.43 \times (-0.5 \times)$ speed <Note> The tape will be played at the speed given in parentheses in the DV/DVCAM mode.

The underline on the setting item denotes the initial setting.

USER menu

<TAPE PROTECT>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
400	STILL TIMER	0000 0001 0002 0003 0004 0005 0006 0007 <u>0008</u>	0.5s 5s 10s 20s 30s 40s 50s 1min <u>2min</u>	This selects the time to be taken until the unit goes into the tape protection mode when it is left standing in the stop mode. (Unit: s = second, min = minute) <Note> With the DV or DVCAM format, the maximum time which can be set is 10s even when a setting above 10s has been selected. The selection screen, however, will operate for up to 2 minutes.
401	SRC PROTECT	<u>0000</u> 0001	<u>STEP</u> HALF	This selects the operation during the tape protection mode when the unit is left standing in the still status in No. 400 protection mode. 0: STEP FWD. 1: HALF LOADING. <Note> When STEP FWD is selected, the unit automatically goes into the HALF LOADING mode when the total time for which the unit is left standing in the still status reaches 30 minutes (DVCPR) or 1 minute (DV or DVCAM).
402	DRUM STDBY	0000 <u>0001</u>	OFF <u>ON</u>	This selects the drum operation in the STANDBY OFF mode. 0: The drum stops rotating. 1: The drum continues rotating.
403	STOP PROTECT	0000 <u>0001</u>	STEP <u>HALF</u>	This selects the operation in the tape protection mode when the unit has been left standing in the STOP mode. 0: STEP FWD 1: HALF LOADING <Note> When STEP FWD is selected, the unit is automatically transferred to the HALF LOADING mode when the total time during which it has been left standing in the STOP mode reaches 30 minutes (or 1 minute with a DV/DVCAM tape).

The underline on the setting item denotes the initial setting.

<Note>

In order to protect the tape and VTR helical heads, it is recommended that the Still Timer be set for automatic tape protection mode in 30 seconds or under.

Setup menus

USER menu

<TIME CODE>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
500	VITC POS-1	0000	10L	This sets the position where the VITC signal is to be inserted. (The same line as for VITC POS-2 in 501 cannot be selected.)
		0001	11L	
		0002	12L	
		0003	13L	
		0004	14L	
		0005	15L	
		<u>0006</u>	<u>16L</u>	
		0007	17L	
		0008	18L	
		0009	19L	
		0010	20L	
501	VITC POS-2	0000	10L	This sets the position where the VITC signal is to be inserted. (The same line as for VITC POS-1 in 500 cannot be selected.)
		0001	11L	
		0002	12L	
		0003	13L	
		0004	14L	
		0005	15L	
		0006	16L	
		0007	17L	
		<u>0008</u>	<u>18L</u>	
		0009	19L	
		0010	20L	
502	VITC BLANK	0000	<u>BLANK</u> <u>THRU</u>	This selects whether to output the VITC data to the positions selected by VITC POS-1 in 500 and VITC POS-2 in 501. 0: Data is not output. 1: Data is output.
		<u>0001</u>		
503*	TCG REGEN	0000	<u>TC&UB</u> TC UB	This selects the signal to be regenerated when the time code generator (TCG) in the REGEN mode. 0: Both the time code and user bit are regenerated. 1: Only the time code is regenerated. 2: Only the user bit is regenerated.
		0001		
		0002		
504*	REGEN MODE	0000	<u>OFF</u> ON	This selects whether values used in the internal time code generator are preset from the front panel or remote controller or synchronized with time code values read from the tape. 0: Values are preset from the front panel or remote controller. (PRESET) 1: Values are synchronized with time code values read from the tape. (REGEN) <Note> When "1" is selected, values selected at set up menu No. 503 (TCG REGEN) are regenerated.
		0001		
505*	EXT TC SEL	0000	<u>LTC</u> VITC	This selects the time code to be used when an external time code is to be used. 0: The LTC of the TIME CODE IN connector is used. 1: The video signal VITC is used.
		0001		
506*	BINARY GP	0000	<u>000</u> 001 010 011 100 101 110 111	This sets the usage status of the user bit of the time code generated by the TCG. 0: NOT SPECIFIED (character set not specified) 1: ISO CHARACTER (8 bits character set based on ISO646, ISO2022) 2: UNASSIGNED 1 (undefined) 3: UNASSIGNED 2 (undefined) 4: UNASSIGNED 3 (undefined) 5: PAGE/LINE 6: UNASSIGNED 4 (undefined) 7: UNASSIGNED 5 (undefined)
		0001		
		0002		
		0003		
		0004		
		0005		
		0006		
		0007		

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

USER menu

<TIME CODE>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
500	VITC POS-1	0000 : <u>0004</u> : 0014	7L : <u>11L</u> : 21L	This sets the position where the VITC signal is to be inserted. (The same line as for VITC POS-2 in 501 cannot be selected.)
501	VITC POS-2	0000 : <u>0006</u> : 0014	7L : <u>13L</u> : 21L	This sets the position where the VITC signal is to be inserted. (The same line as for VITC POS-1 in 500 cannot be selected.)
502	VITC BLANK	0000 <u>0001</u>	<u>BLANK</u> <u>THRU</u>	This selects whether to output the VITC data to the positions selected by VITC POS-1 in 500 and VITC POS-2 in 501. 0: Data is not output. 1: Data is output.
503*	TCG REGEN	<u>0000</u> 0001 0002	<u>TC&UB</u> TC UB	This selects the signal to be regenerated when the time code generator (TCG) in the REGEN mode. 0: Both the time code and user bit are regenerated. 1: Only the time code is regenerated. 2: Only the user bit is regenerated.
504*	REGEN MODE	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether values used in the internal time code generator are preset from the front panel or remote controller or synchronized with time code values read from the tape. 0: Values are preset from the front panel or remote controller. (PRESET) 1: Values are synchronized with time code values read from the tape. (REGEN) <Note> When "1" is selected, values selected at set up menu No. 503 (TCG REGEN) are regenerated.
505*	EXT TC SEL	<u>0000</u> 0001	<u>LTC</u> VITC	This selects the time code to be used when an external time code is to be used. 0: The LTC of the TIME CODE IN connector is used. 1: The video signal VITC is used.
506*	BINARY GP	<u>0000</u> 0001 0002 0003 0004 0005 0006 0007	<u>000</u> 001 010 011 100 101 110 111	This sets the usage status of the user bit of the time code generated by the TCG. 0: NOT SPECIFIED (character set not specified) 1: ISO CHARACTER (8 bits character set based on ISO646, ISO2022) 2: UNASSIGNED 1 (undefined) 3: UNASSIGNED 2 (undefined) 4: UNASSIGNED 3 (undefined) 5: PAGE/LINE 6: UNASSIGNED 4 (undefined) 7: UNASSIGNED 5 (undefined)
507	PHASE CORR	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether to control the phase correction of the LTC generated by the TCG. 0: Phase correction control is not performed. 1: Phase correction control is performed.
508*	TCG CF FLAG	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether the CF flag of the TCG is to ON. 0: CF flag is OFF. 1: CF flag is ON.

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

USER menu

<TIME CODE> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
507	PHASE CORR	<u>0000</u> 0001	OFF ON	This selects whether to control the phase correction of the LTC generated by the TCG. 0: Phase correction control is not performed. 1: Phase correction control is performed.
508*	TCG CF FLAG	<u>0000</u> 0001	OFF ON	This selects whether the CF flag of the TCG is to ON. 0: CF flag is OFF. 1: CF flag is ON.
509	DF MODE	<u>0000</u> 0001	DF NDF	This selects the DF/NDF mode for CTL and TCG. 0: Drop frame mode. 1: Non-drop frame mode. No. 509 is valid when the CONTROL is LOCAL or LOCAL ENA of item 004 to "ENA".
510*	RUN MODE	<u>0000</u> 0001	REC FREE	This selects the time code generator run mode. 0: Generator runs only during recording. 1: Generator runs during usual operation. <Note> Even if "0" is selected, the time code generator runs during usual operation when "1" is selected at the setting menu No. 504 (REGEN MODE).
511*	TC OUT REF	<u>0000</u> 0001	V OUT TC IN	This is used to switch the phase of the time code, which is output from the TIME CODE OUT connector, for the external LTC input when the TC INT/EXT switch is at the EXT position. (In EE mode only) 0: Time code is synchronized with output video signal. 1: Time code is synchronized with external time code input.

<VIDEO>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
600*	P _B /P _R IN LV	<u>0000</u> 0001	MII B-CAM	This selects the component input signal level. 0: MII level. 1: B cam level.
601*	INT BB SIG	<u>0000</u> 0001	OFF BB	This selects whether to generate the internal black burst signal. 0: Signal is not generated. 1: Signal is generated.
602*	INPUT C KILL	<u>0000</u> 0001	B/W AUTO	This selects color killer processing for the video input signals. 0: The signals are forcibly processed as B/W signals. 1: The signals are automatically processed.
603*	OUT VSYNC	<u>0000</u> 0001	N-VF VF	This selects whether to float the vertical sync position of the video output in order to align the video output phase with the input in the EE/record/edit modes. 0: Signals are not floated. 1: Signals are floated.
604	V-MUTE SEL	<u>0000</u> 0001	N-MUTE LOW_RF	This selects whether the video output signal is to be muted when the blank portion of the tape is detected during playback. 0: No muting (picture freezes). 1: Muting (picture turns grey).
605	CC (F1) BLANK	<u>0000</u> 0001	BLANK THRU	This selects ON or OFF for the closed capture signal in the first field. 0: Forced blanking performed. 1: Blanking not performed.

* The Setup menu can only be displayed for the model AJ-D450.

The underline on the setting item denotes the initial setting.

Setup menus

USER menu

<TIME CODE> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
510*	RUN MODE	<u>0000</u> 0001	<u>REC</u> FREE	This selects the time code generator run mode. 0: Generator runs only during recording. 1: Generator runs during usual operation. <Note> Even if "0" is selected, the time code generator runs during usual operation when "1" is selected at the setting menu No. 504 (REGEN MODE).
511*	TC OUT REF	<u>0000</u> 0001	<u>V OUT</u> TC_IN	This is used to switch the phase of the time code, which is output from the TIME CODE OUT connector, for the external LTC input when the TC INT/EXT switch is at the EXT position. (In EE mode only) 0: Time code is synchronized with output video signal. 1: Time code is synchronized with external time code input.

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

Setup menus

USER menu

<VIDEO> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
606	CC (F2) BLANK	<u>0000</u> 0001	BLANK THRU	This selects ON or OFF for the closed capture signal in the second field. 0: Forced blanking performed. 1: Blanking not performed.
608	FREEZE SEL	<u>0000</u> 0001	FIELD FRAME	This selects the freeze mode for still pictures. 0: Field freeze 1: Frame freeze <Note> When frame freeze is selected, the frame freeze mode is established even during slow motion.
611	EDH	<u>0000</u> 0001	OFF ON	This selects whether to superimpose EDH onto the serial output signals. 0: EDH is not superimposed. 1: EDH is superimposed. • This item setting is valid when the optional serial interface board has been installed.
612	WIDE SELECT	<u>0000</u> 0001 0002	AUTO WIDE NORMAL	This selects the operation to be conducted in response to the WIDE information. 0: During recording, if the Y/C input signals contain WIDE information, the WIDE information is recorded on the tape. During playback, if WIDE information is on the tape, it is added to the Y/C output signals. 1: During recording, the WIDE information is recorded on the tape regardless of whether the Y/C input signals contain the WIDE information. During playback, the WIDE information is added to the Y/C output signals regardless of whether the WIDE information is on the tape. → Forced WIDE ON 2: During recording, the WIDE information is not recorded on the tape regardless of whether the Y/C input signals contain the WIDE information. During playback, the WIDE information is not added to the Y/C output signals regardless of whether the WIDE information is on the tape. → Forced WIDE OFF <Note> This item is effective during recording at the start of the recording and during playback at all times. Therefore, when its setting has been changed during recording, the MENU contents will be changed but no change will occur in the actual operation.
613	VIN SETUP	<u>0000</u> 0001	THRU CUT	This selects whether the composite signal is to be recorded with setup or without setup. 0: When recording signals with no setup. 1: When recording signals with 7.5% setup. <Note> When recording composite signals, be sure to double-check whether the signals are to be recorded with or without setup.
614	VOUT SETUP	<u>0000</u> 0001	THRU ADD	This selects the composite output signal. 0: The signal is output without setup. 1: The signal is output with 7.5% setup.

The underline on the setting item denotes the initial setting.

USER menu

<VIDEO> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
601*	INT BB SIG	<u>0000</u> 0001	<u>OFF</u> BB	This selects whether to generate the internal black burst signal. 0: Signal is not generated. 1: Signal is generated.
602*	INPUT C KILL	<u>0000</u> 0001	<u>B/W</u> AUTO	This selects colour killer processing for the video input signals. 0: The signals are forcibly processed as B/W signals. 1: The signals are automatically processed.
603*	OUT VSYNC	<u>0000</u> 0001	<u>N-VF</u> VF	This selects whether to float the vertical sync position of the video output in order to align the video output phase with the input in the EE/record/edit modes. 0: Signals are not floated. 1: Signals are floated.
604	V-MUTE SEL	<u>0000</u> 0001	<u>N-MUTE</u> LOW_RF	This selects whether the video output signal is to be muted when the blank portion of the tape is detected during playback. 0: No muting (picture freezes). 1: Muting (picture turns grey).
608	FREEZE SEL	<u>0000</u> 0001	<u>FIELD</u> FRAME	This selects the freeze mode for still pictures. 0: Field freeze 1: Frame freeze <Note> When frame freeze is selected, the frame freeze mode is established even during slow motion.
611	EDH	<u>0000</u> 0001	<u>OFF</u> ON	This selects whether to superimpose EDH onto the serial output signals. 0: EDH is not superimposed. 1: EDH is superimposed. • This item setting is valid when the optional serial interface board has been installed.
612	WIDE SELECT	<u>0000</u> 0001 0002	<u>AUTO</u> WIDE NORMAL	This selects the operation to be conducted in response to the WIDE information. 0: During recording, if the Y/C input signals contain WIDE information, the WIDE information is recorded on the tape. During playback, if WIDE information is on the tape, it is added to the Y/C output signals. 1: During recording, the WIDE information is recorded on the tape regardless of whether the Y/C input signals contain the WIDE information. During playback, the WIDE information is added to the Y/C output signals regardless of whether the WIDE information is on the tape. → Forced WIDE ON 2: During recording, the WIDE information is not recorded on the tape regardless of whether the Y/C input signals contain the WIDE information. During playback, the WIDE information is not added to the Y/C output signals regardless of whether the WIDE information is on the tape. → Forced WIDE OFF <Note> This item is effective during recording at the start of the recording and during playback at all times. Therefore, when its setting has been changed during recording, the MENU contents will be changed but no change will occur in the actual operation.

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

USER menu

<AUDIO>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
700*	CH1 IN LV	0000 0001 0002 0003	4dB 0dB -20dB -60dB	This selects the audio input (CH1) reference level switching.
701*	CH2 IN LV	0000 0001 0002 0003	4dB 0dB -20dB -60dB	This selects the audio input (CH2) reference level switching.
703	CH1 OUT LV	0000 0001 0002	4dB 0dB -20dB	This selects the audio output (CH1) reference level switching.
704	CH2 OUT LV	0000 0001 0002	4dB 0dB -20dB	This selects the audio output (CH2) reference level switching.
713	MONI CH SEL	0000 0001 0002 0003	AUTO 1 AUTO 2 AUTO 3 AUTO 4	<p>This selects the monitor output.</p> <p>0: In the tape speed range of $-0.43\times$ ($-0.5\times$) to $+1\times$ normal speed, PCM AUDIO is output; at all other times, CUE is automatically output.</p> <p>1: In the PLAY mode, PCM AUDIO is output; at all other times, CUE is automatically output.</p> <p>2: In the PLAY mode, PCM AUDIO is output; in the tape speed range of $-0.43\times$ ($-0.5\times$) to $+1\times$ normal speed, QUICK PCM AUDIO is output; at all other times, CUE is automatically output.</p> <p>3: In the tape speed range of $-0.2\times$ to $+0.2\times$ normal speed, QUICK PCM AUDIO is output; in the tape speed ranges of $-0.43\times$ ($-0.5\times$) to $-0.2\times$ and $+0.2\times$ to $+1\times$ (excluding $-0.2\times$ and $+0.2\times$) normal speed, PCM AUDIO is output; at all other times, CUE is automatically output.</p> <p><Notes></p> <p>1. The tape speed figures given above in parentheses apply when DV or DVCAM format tapes are used.</p> <p>2. PCM AUDIO complies with the AUDIO MONITOR SELECT SW setting and is set to CH1, CH2 or MIX (CH1+CH2).</p> <p>3. "QUICK PCM AUDIO" is a playback mode in which priority is given to aligning the video and audio phases during slowmotion playback. In this mode, the sound at $1\times$ normal speed is played back one frame at a time each time the video frame is updated. (During normal PCM AUDIO slow-motion playback, the sound is stretched out so that it is played back after the pictures.)</p>
714*	REC CH1	0000 0001 0002	CH1 CH2 CH1+2	<p>This selects the input signal to be recorded on the audio CH1 track.</p> <p>0: Audio input CH1 signal.</p> <p>1: Audio input CH2 signal.</p> <p>2: Mixed audio input CH1 and CH2 signal.</p>
715*	REC CH2	0000 0001 0002	CH1 CH2 CH1+2	<p>This selects the input signal to be recorded on the audio CH2 track.</p> <p>0: Audio input CH1 signal.</p> <p>1: Audio input CH2 signal.</p> <p>2: Mixed audio input CH1 and CH2 signal.</p>

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

Setup menus

USER menu

<AUDIO> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
716	REC CUE	<u>0000</u> 0001 0002	<u>CH1</u> CH2 CH1+2	This selects the input signal recorded in CUE. 0: The signal selected by SETUP-MENU No. 714 is recorded on CH1. 1: The signal selected by SETUP-MENU No. 715 is recorded on CH2. 2: The signal selected by SETUP-MENU No. 714 and No. 715 are mixed and recorded on CH1 and CH2.
718	DV OUTPUT	<u>0000</u> 0001 0002	<u>ST1</u> ST2 ST1+2	This selects the AUDIO CH1 and CH2 output signals during DV or DVCAM format playback. 0: The CH1 track signals are output to CH1 and the CH2 track signals to CH2. (Only the sound during shooting is output.) 1: The CH3 track signals are output to CH1 and the CH4 track signals to CH2. (Only the audio dubbing sound is output.) 2: The mixed CH1 and CH3 track signals are output to CH1 and the mixed CH2 and CH4 track signals to CH2. (The sound during shooting and audio dubbing sound are output simultaneously.) <Note> This item setting is valid only when the tape recorded on the four channels of the DV or DVCAM format is played back.
719	PB FADE	<u>0000</u> 0001 0002	<u>AUTO</u> CUT FADE	This selects the processing method for the audio edit points (IN point, OUT point) during playback. 0: According to the status during recording. (Setup menus No. 309, 310) 1: Forced CUT 2: Forced FADE
720	EMBEDDED AUD	<u>0000</u> <u>0001</u>	<u>OFF</u> <u>ON</u>	This selects whether to superimpose the audio data onto the serial output. 0: Data is not superimposed. 1: Data is superimposed. <Note> This item is valid when both optional serial interface and optional digital audio interface boards have been installed.
721	LINE CH SEL	<u>0000</u> 0001	<u>PCM</u> AUTO	This selects the audio output (LINE OUT). 0: PCM AUDIO or QUICK PCM AUDIO is output. 1: Whatever is selected by SETUP-MENU No. 713 (MONI CH SEL) output. <Note> The PCM AUDIO or QUICK PCM AUDIO output is not affected by the AUDIO MONITOR SELECT SW, and CH1 and CH2 are output independently.
722*	INT SG	<u>0000</u> 0001	<u>OFF</u> <u>ON</u>	This selects whether the internal signal is to be used for the audio input signal. 0: The internal signal is not selected. 1: The internal signal is selected. <Note> The internal signal has a frequency of 1 kHz.
723	DV PB ATT	<u>0000</u> 0001	<u>OFF</u> <u>ON</u>	This selects the audio output level for DV format playback. 0: The audio output level is not attenuated. 1: The audio output level is attenuated (reduced). <Notes> As indicated below, whether the setting takes effect or not depends on the size of the cassette tape used. 1. When an "L" size cassette is used The setting takes effect only when "DV" has been selected as the setting for setup menu No. 108 (FORMAT SEL). 2. When an "M" size cassette is used The setting does not take effect. 3. When an "S" size cassette is used The setting takes effect only when "DV" has been selected as the setting for setup menu No. 108 (FORMAT SEL).

The underline on the setting item denotes the initial setting.

* The Setup menu can only be displayed for the model AJ-D450.

USER menu

<AUDIO> (continued)

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
725	CUE SLOW	0000 0001	<u>STEP</u> LINEAR	This selects the tape travel status (CUE track playback status) during SLOW playback. 0: Priority is given to the output picture, and tape travel is set to the step feed status. 1: Priority is given to CUE track playback, and the tape travel is set to the linear status.
<Notes> When "1" (LINEAR) has been set: <ul style="list-style-type: none"> • It may not be possible to achieve as clear a picture as in the STEP mode. • The CTL counter may not operate properly. 				

<MENU>

Item		Setting		Description
No.	Superimposed display	No.	Superimposed display	
A00	LOAD	0000 0001 0002 0003	<u>USER2</u> USER3 USER4 USER5	This selects the user file whose contents will be loaded into USER1. 0: The USER2 file contents are loaded. 1: The USER3 file contents are loaded. 2: The USER4 file contents are loaded. 3: The USER5 file contents are loaded. <Note> When the SET button is pressed after loading, the setting will be stored in the memory. When the MENU button is pressed, the setting will not be changed.
A01	SAVE	0000 0001 0002 0003 0004	<u>USER2</u> USER3 USER4 USER5 LOCKED	This selects the user file into which the USER1 settings will be saved. 0: The settings are saved in USER2. 1: The settings are saved in USER3. 2: The settings are saved in USER4. 3: The settings are saved in USER5. 4: This display appears when all the user files are in the change prohibit status. <Notes> <ul style="list-style-type: none"> • User files whose status have been set to change prohibit cannot be selected. • When all the user files are in the change prohibit status, the "LOCKED" display appears and the contents cannot be saved.
A02	P.ON LOAD	0000 0001 0002 0003 0004	<u>OFF</u> USER2 USER3 USER4 USER5	This loads the contents of the selected user file into USER1 and it starts operation with the USER1 settings when the power is turned on. 0: Operation is started with the settings of the previously set user file. 1: The contents of USER2 are loaded into USER1 and operation is started with the USER1 settings. 2: The contents of USER3 are loaded into USER1 and operation is started with the USER1 settings. 3: The contents of USER4 are loaded into USER1 and operation is started with the USER1 settings. 4: The contents of USER5 are loaded into USER1 and operation is started with the USER1 settings.
A03	MENU LOCK	0000 0001	<u>OFF</u> ON	This selects whether to set or release the user file (USER2 – USER5) lock mode. 0: The lock is released (changes can be made). 1: The lock is set (changes are prohibited). <Note> The lock cannot be set for USER1.

The underline on the setting item denotes the initial setting.

<Notes>

- No. A00 (LOAD), No. A01 (SAVE) and No. A02 (P.ON LOAD) are the menu items which can be set only for USER1. They are not displayed with the USER2 – USER5 files.
- No. A03 (MENU LOCK) is the menu item which can be set only for the USER2 – USER5 files. It is not displayed with USER1.

Time code/user bit

Time code

The time code is used when the time code signal generated by the time code generator (time code signal generator) is to be recorded on the tape, its values are to be read by the time code reader (time code signal reader), and the absolute position of the tape is to be displayed in increments of hours, minutes, seconds and frames.

The time code is written in the sub-code area (data area) of the helical track. This enables insert editing to be conducted independently using the time code alone. In addition, the VTR's playback speed can be read from the stop mode to slow-motion playback up to high-speed play (approx. 100X normal speed).

The time code values are indicated using the display and superimpose functions.

TCR 00 : 07 : 04 : 24
↑ ↑ ↑ ↑
Hours Minutes Seconds Frames

<Note>

Time code reader values normally appear on the superimposed display.

Values appear as shown below on the front display.

Playback: Time code reader values

REC, EE: Time code generator values

Time code generator values can be checked when the REC button is pressed even during playback.

User bit

"User bit" refers to the 32-bit (8-digit) data frame among the time code signals which has been released to users. It enables operator numbers values to be recorded.

The alphanumeric characters which can be used for the user bit are the figures 0 to 9 and the letters A to F.

Recording internal/external time codes

1. Setting the internal time code

- 1** Place the VTR in the stop mode.
- 2** Set the CTL/TC/UB switch to TC.
- 3** Set the TC INT/EXT switch to INT. (Internal time code selected)
- 4** Set the RUN MODE. (setup menu No. 510)
REC (RUN): The time code runs at the same time as the recording proceeds.
FREE (RUN): The time code runs in the same way as the time regardless of the VTR's operation.
- 5** Set the REGEN MODE. (setup menu No. 504)
ON (REGEN): Continuity is maintained with the recorded time code before editing. (Detailed settings are also possible using the menu settings. See the menu items below.)
Setting menu No. 503 (TCG REGEN)
OFF (PRESET): Recording starts from the value set with the TC PRESET button.
- 6** Set the TC PRESET button.
Use the TC PRESET button to set the start number of the time code or user bit.
 - 1** The leftmost digit flashes.
Align the flashing light and the digit to be set with the cursor buttons (◀, ▶).
 - 2** Press the cursor button ▲ or ▼ to change the value.
Each time the button is pressed, the number changes. The setting range is given below.
 - **When using the time code and user bit in real time**
00:00:00:00 – 23:59:59:29
 - **User bit**
00 00 00 00 – FF FF FF FF
 - 3** Repeat steps 1 and 2 to change the value.
 - 4** When the setting of the start number is completed, press the SET button. In the FREE RUN mode, the time code now starts running.
 - 5** Proceed with the recording or editing.

2. Setting the external time code (TC switch → EXT)

- 1** Place the VTR in the stop mode.
- 2** Set the TC/CTL/UB switch to TC.
- 3** Set the TC INT/EXT switch to EXT. (External time code selected)
- 4** Setup menu No. 505 (EXT TC SEL) can be set as follows.
LTC: The LTC signal input to the TIME CODE IN connector (BNC) on the rear jack panel is recorded as the time code.
<Note> The LTC signal must be synchronized with the video signal.
VITC: The input video signal's VITC is recorded as the time code.

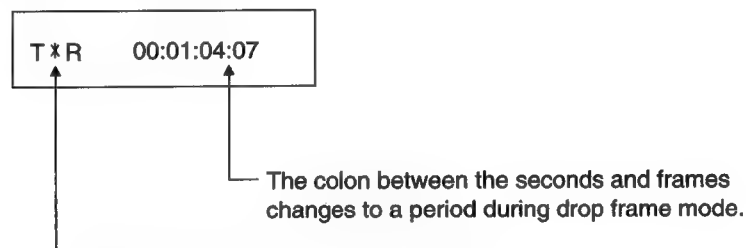
Reproducing the time code/user bit

- 1** Place the unit in the stop mode.
- 2** Set the CTL/TC/UB switch to TC or UB.
TC: The time code is displayed.
UB: The user bit is displayed.
 - When it is no longer possible to read the time code, it is interpolated using the CTL signal.
- 3** Press the PLAY button.
Playback now commences, and the time code appears on the display.
When setup menu No.006 (SUPER) is ON, the time code value is superimposed onto the video signal from the VIDEO OUT 3 connector.

<Notes>

- The colon between the seconds and frames changes to a period when the drop frame time code is read.
- When the time code signal cannot be read, the time code is automatically interpolated by the CTL signal.

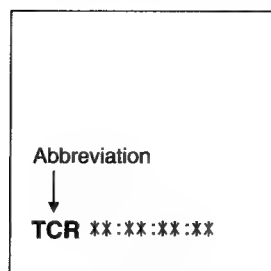
The superimposed appears as shown below.



When the time code signal cannot be read,
an asterisk (*) is displayed on the superimposed TV monitor.

Superimpose screen

The control signals, time code, etc. are displayed using abbreviations.

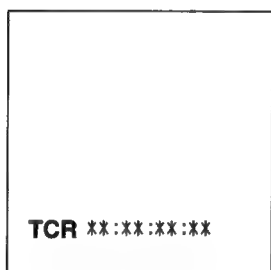


TV monitor

CTL = control signal
TCR = TC time code reading
UBR = TC user bit reading

Characters displayed

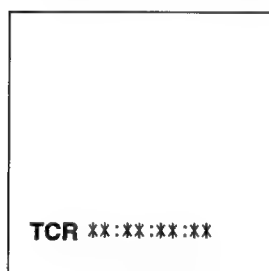
The background of characters superimposed on the display can be changed using setup menu No. 007 (CHARA TYPE).



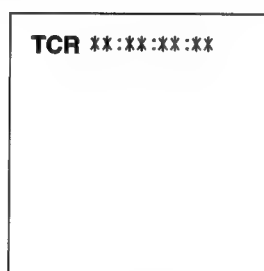
TV monitor

Display position

The position of the characters superimposed on the display can be changed using setup menus No. 001 (CHARA H-POS) and No. 002 (CHARA V-POS).



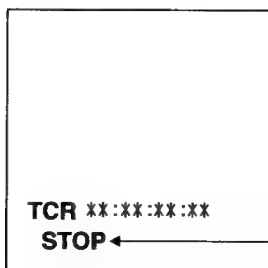
TV monitor



TV monitor

Operation mode

The VTR's operation mode can also be displayed using setup menu No. 003 (DISPLAY SEL).



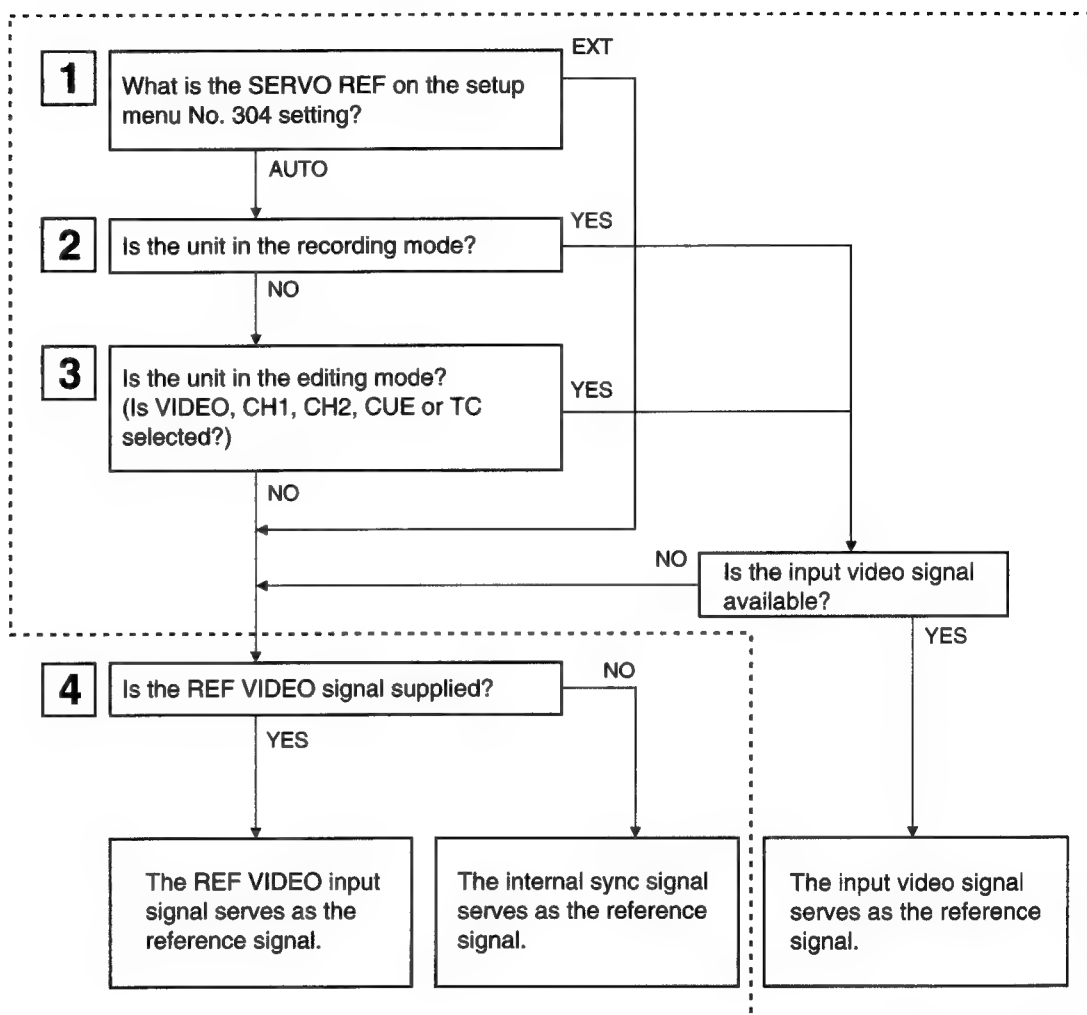
TV monitor

VTR operation mode

Servo reference

This unit automatically selects the input video signal selected by the INPUT switch, the reference video signal supplied from the REF VIDEO input connector or the internal sync signal as the servo reference signal.

When the signal is selected, the unit's mode and servo reference stand in the relationship shown in the flowchart presented below.



☐ Applicable only to AJ-D450.

Servo reference setting tables

The servo reference signal is switched as shown in the tables below depending on the servo reference setting, deck mode and what input signal is available. When the mode is transferred to editing or recording/playback, the image may be disturbed and the transfer may be delayed if the references during playback and recording do not match.

■ During playback or special playback (AJ-D450 only)

SERVO REF on the setup menu No. 304 position	Input signal status		Reference signal (servo reference)
	VIDEO IN signal	REF IN signal	
AUTO	○	○	REF IN signal
	○	×	Internal sync signal
	×	○	REF IN signal
	×	×	Internal sync signal
EXT	○	○	REF IN signal
	○	×	Internal sync signal
	×	○	REF IN signal
	×	×	Internal sync signal

■ Playback or special playback (AJ-D440 only)

Input signal status REF IN signal	Reference signal
○	REF IN signal
×	Internal sync signal

■ During recording or editing (AJ-D450 only)

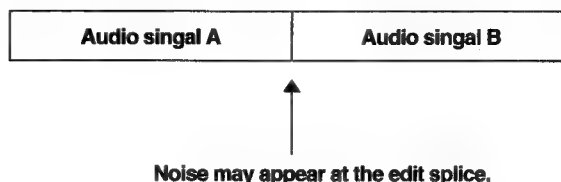
SERVO REF on the setup menu No. 304 position	Input signal status		Reference signal (servo reference)
	VIDEO IN signal	REF IN signal	
AUTO	○	○	VIDEO IN signal
	○	×	VIDEO IN signal
	×	○	REF IN signal
	×	×	Internal sync signal
EXT	○	○	REF IN signal
	○	×	Internal sync signal
	×	○	REF IN signal
	×	×	Internal sync signal

“○” denotes that the signal is supplied: “×” denotes that the signal is not supplied.

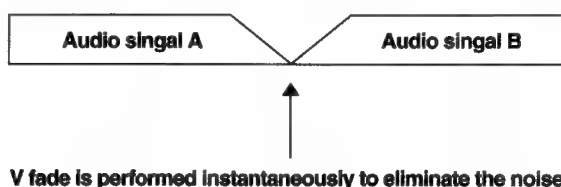
Audio V Fade Function (AJ-D450 only)

When editing tapes, the edit point splicing selection (setup menu No. 309 and 310) information is recorded on the tape. This information is then sensed during playback, and V fade or cut processing is automatically performed for these sections. [However, only when the playback fade selection (No. 719) is AUTO.]

When the edit point splicing selection (setup menu No. 309 and 310) is CUT



When the edit point splicing selection (setup menu No. 309 and 310) is FADE



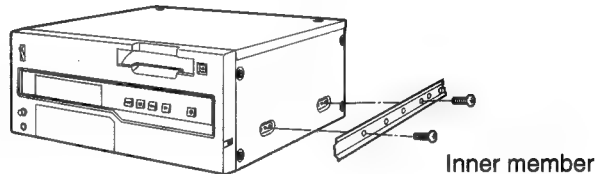
<Notes>

- When the playback fade selection (No. 719) is CUT, cut processing is performed for all splices.
- When the playback fade selection (No. 719) is FADE, V fade processing is performed for all splices.

Rack mounting

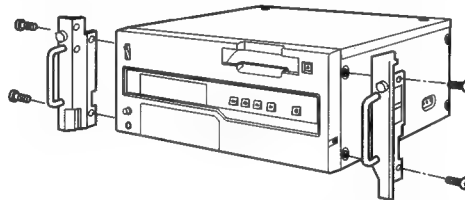
The unit can be mounted into a 19-inch standard rack if the optional rack-mounting adaptors (AJ-MA75P) are used. For the installation rails, it is recommended that the rail and bracket for 18" length (model number CC3001-99-0400) of CHASSIS TRAK be used. (The complete slide rail and bracket unit is not available from Panasonic) For further details, consult with your dealer.

- 1** Remove the screws on the left and right sides of the unit.
- 2** Use the removed screw to attach the inner members of the slide rails.

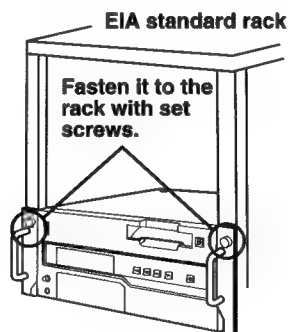


The length of the screws used is subject to restriction. If some of the mounting screws have been lost or misplaced, use screws which are less than 4" long in their place. Use four screws to secure each inner member.

- 3** Attach the outer member brackets to the rack.
Check that the height is the same for the left and right brackets.
- 4** Attach the AJ-MA75P rack-mounting adaptors with included 4 screws.



- 5** Remove the 4 rubber legs from the bottom of the unit, and install the unit in the rack.
After the unit has been installed, check that it moves smoothly along the rails.



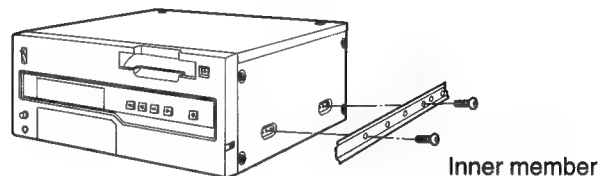
<Notes>

- Keep the temperature inside the rack to between +41°F (5°C) and +104°F (40°C).
- Bolt the rack securely to the floor so that it will not topple over when the VTR is drawn out.

Rack mounting

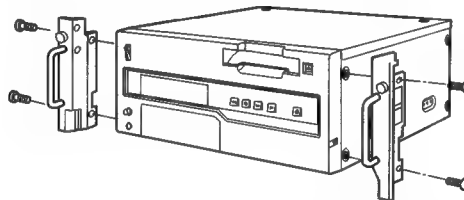
The unit can be mounted into a 19-inch standard rack if the optional rack-mounting adaptors (AJ-MA75P) are used. For the installation rails, it is recommended that the rail and bracket for 18" length (model number CC3001-99-0400) of CHASSIS TRAK be used. (The complete slide rail and bracket unit is not available from Panasonic) For further details, consult with your dealer.

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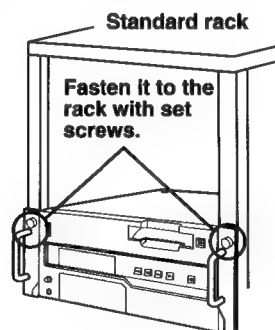


The length of the screws used is subject to restriction. If some of the mounting screws have been lost or misplaced, use screws which are less than 10 mm long in their place. Use four screws to secure each inner member.

- 3** Attach the outer member brackets to the rack.
Check that the height is the same for the left and right brackets.
- 4** Attach the AJ-MA75P rack-mounting adaptors with included 4 screws.



- 5** Remove the 4 rubber legs from the bottom of the unit, and install the unit in the rack.
After the unit has been installed, check that it moves smoothly along the rails.



<Notes>

- Keep the temperature inside the rack to between 5°C and 40°C.
- Bolt the rack securely to the floor so that it will not topple over when the VTR is drawn out.

Video head cleaning

This unit has an auto head cleaning function which automatically reduces the dirt on the heads. However, to further increase the unit's reliability, it is recommended that its video heads be cleaned every day.

Use the cleaning fluid designated by Panasonic.

Condensation

Condensation occurs due to the same principle involved when droplets of water form on a window pane of a heated room. It occurs when the unit or tape is moved between places where the temperature or humidity varies greatly or when, for instance:

- It is moved to a very humid place full of steam or a room immediately after it has been heated up.
- It is suddenly moved from a cold location to a hot or humid location.

When moving the unit to locations such as these, leave it standing for about 10 minutes rather than switching on the power immediately.

If condensation has formed on or in the unit, the "E-20" code flashes in the counter display and the cassette tape is automatically ejected.

Keep the power supplied and simply wait until the "E-20" code goes off.

Video head cleaning

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Use the cleaning fluid designated by Panasonic.

Condensation

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When moving the unit to locations such as these, leave it standing for about 10 minutes rather than switching on the power immediately.

If condensation has formed on or in the unit, the "E-20" code flashes in the counter display and the cassette tape is automatically ejected.

Keep the power supplied and simply wait until the "E-20" code goes off.

- | | |
|---|---|
| ■ Do not insert fingers or any objects into the video cassette holder. | ■ Use this unit horizontally and do not place anything on the top panel. |
| ■ Avoid operating or leaving the unit near strong magnetic fields. Be especially careful of large audio speakers. | ■ Cassette tape can be used only for one-side, one direction recording. Two-way or two-track recordings cannot be made. |
| ■ Avoid operating or storing the unit in an excessively hot, cold, or damp environment as this may result in damage both to the unit and to the tape. | ■ Cassette tape can be used for either Colour or Black & White recording. |
| ■ Do not spray any cleaner or wax directly on the unit. | ■ Do not attempt to disassemble the unit. There are no user serviceable parts inside. |
| ■ If the unit is not going to be used for a length of time, protect it from dirt and dust. | ■ If any liquid spills inside the unit, have the unit examined for possible damage. |
| ■ Do not leave a cassette in the unit when not in use. | ■ Refer any needed servicing to authorized service personnel. |
| ■ Do not block the ventilation slots of the unit. | |

Error messages

When a warning occurs in this unit, an error number appears at the counter display. Opening the DIAG menu will display the error description on the monitor. Also, when an abnormal operation is detected in this unit, an error number flashes on the counter display.

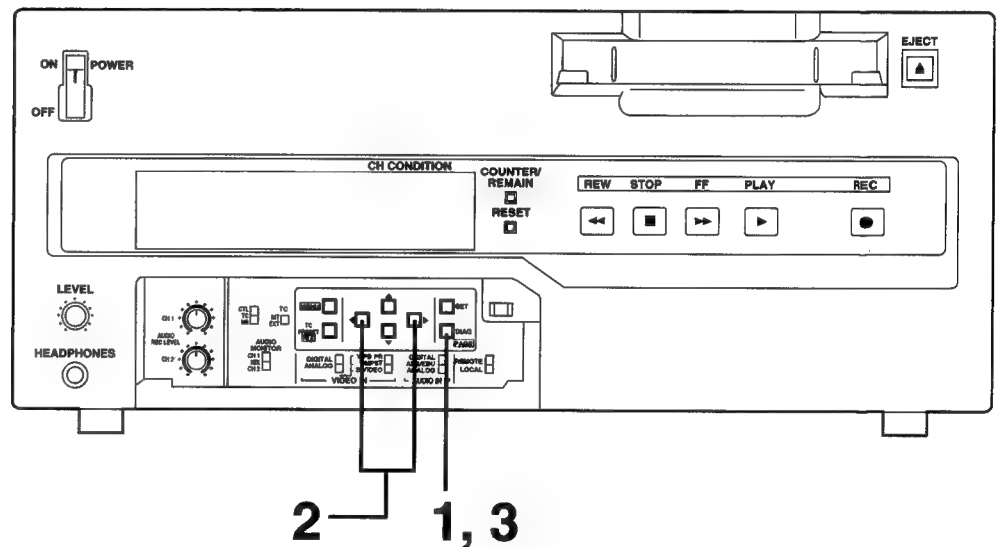
DIAG menu

This display the VTR information.

VCR information includes "WARNING" information and "HOURS METER" (usage time) information. A DIAG menu appears on the monitor when the monitor is connected to the VIDEO OUT 3 connector on the connector section.

Displaying the DIAG menu

- 1** Press the DIAG button.
The DIAG menu screen is displayed on the monitor, and the error number is displayed on the counter display.
- 2** The "WARNING" information and "HOURS METER" information can be switched by pressing the cursor buttons (◀, ▶).
- 3** Press the DIAG button again to return to the original display.



"WARNING" information display

- A warning message is displayed on the monitor whenever a warning occurs. When warnings have not been detected, "NO WARNING" is displayed on the monitor, and "Err-" is displayed on the counter display.
- When multiple warning occur, the descriptions for each warning can be checked by using the cursor buttons (▲, ▼).

Error messages

Displaying the “HOURS METER” information

Press the cursor buttons (▲, ▼) to move the cursor (*).

The number for the item where the cursor is located is shown on the counter display.

Item No.	Item	Description
H00	OPERATION	Displays the time that the power has been supplied in one-hour units (10-hour units at the counter display).
H01	DRUM RUN	Displays the time that the drum has been rotating in one-hour units (10-hour units at the counter display).
H02	TAPE RUN	Displays the time that the tape has been running during FF, REW, PLAY, SEARCH (JOG, VAR, SHTL), REC, and EDIT modes (except for STILL in the JOG, VAR or SHTL mode) in one-hour units (10-hour units at the counter display).
H03	THREADING	Displays the number of times for threading/unthreading in single units (10-count units at the counter display).
H11	DRUM RUN r	Displays the time that the drum has been rotating in one-hour units (10-hour units at the counter display). (Can be reset)
H12	TAPE RUN r	Displays the time that the tape has been running during FF, REW, PLAY, SEARCH (JOG, VAR, SHTL), REC, and EDIT modes (except for STILL in the JOG, VAR or SHTL mode) in one-hour units (10-hour units at the counter display). (Can be reset)
H13	THREADING r	Displays the number of times for threading/unthreading in single units (10-count units at the counter display). (Can be reset)

<Note>

The resettable items in the “HOURS METER” information are reset by the service personnel when performing maintenance or other work.

If T&S&M is selected in the setup menu No. 003 (DISPLAY SEL), a message appears in the mode display whenever a warning or error occurs. When multiple events occur, the event with the highest priority is displayed.

Priority	Counter display and monitor display	Description
High ▲ ↓ Low	Error messages (See error message table)	When an abnormal operation is detected in this machine, an error number flashes on the counter display and an error message is displayed.
	INT SG*	If “BB” in No. 601 (INT BB SIG) in the setup menu is selected, pressing the REC button (E to E mode) will display “INT SG” for the first two seconds. In the AJ-D450, this is also displayed for the first two seconds when starting editing from the external controller.
	NO INPUT*	If there is no input signal (except for analog audio) to the connector selected using the INPUT SELECT switch, pressing the REC button (E to E mode) will display “NO INPUT” for the first two seconds. In the AJ-D450, this is also displayed for the first two seconds when starting editing from the external controller.
	Warning messages (See warning message table)	When a warning occurs in this unit, an error number appears at the counter display and warning message is displayed. When multiple warnings occur, the warning with the highest priority is displayed.

<Note>

Items marked with an asterisk (*) indicate AJ-D450 only.

Warning

Priority	Error No.	TV monitor display*	Description	VTR operation
High ↑ ↓ Low	E-10* (Err-10)	FAN STOP	Error No. lights when a fan motor stops operating.	Continued
	E-00* (Err-00)	SERVO NOT LOCKED	Error No. lights when servo disturbances continue for 3 or more seconds during playback, recording or editing.	Continued
	E-01* (Err-01)	LOW RF	Error No. lights when envelope levels approx. 1/3 that of normal levels are detected for more than 1 sec. during playback, recording or editing.	Continued
	E-02* (Err-02)	HIGH ERROR RATE	Error No. lights when the error rate increases and correction/interpolation is performed on either the video or audio playback signal.	Continued

* Displays when warning information is checked by pressing the DIAG button.

AUTO OFF mode

The following error number flashes on the counter display section.

Error No.	TV monitor display	Descriptions	VTR operation (VTR measures)
E-20	DEW	<p>When condensation is detected, the error no. display flashes, and the unit goes into EJECT mode. The drum rotates after the cassette tape is ejected to remove condensation.</p> <p>When the condensation has been removed, the error no. display disappears and the VTR may be used.</p> <p><Notes></p> <p>1) The drum rotates as soon as condensation is detected when the unit is in EJECT mode.</p> <p>2) When condensation is detected while a cassette tape is inserted, drum rotation stops, the cassette tape is ejected and the drum rotation begins again.</p>	EJECT
E-29	FRONT LOAD MOTOR	<p>The cassette does not move up even when 5 seconds have elapsed since the VTR was transferred to the eject mode.</p> <p><Note></p> <p>After inserting the cassette, the unit will go to EJECT mode if cassette is not loaded after six seconds.</p>	Stop (POWER OFF→ON)
E-31	LOADING MOTOR	<p>The unloading operation is not completed within 6 seconds.</p> <p><Note></p> <p>The unit will go to EJECT mode (unloading) if the loading operation is not completed within six seconds.</p>	Stop (POWER OFF→ON)
E-35	SERVO CONTROL ERR	There is no response from the servo microcomputer for 1 or more seconds.	Stop (POWER OFF→ON)
E-36	SERVO ERROR	Only the servo microcomputer was reset in an instantaneous power failure.	Stop (POWER OFF→ON)
E-37	SERVO COMM ERROR	The servo microcomputer does not follow the instructions of the system control micorcomputer even when 10 seconds have elapsed.	Stop (POWER OFF→ON)

Error messages

Error No.	TV monitor display	Descriptions	VTR operation (VTR measures)
E-51	FRONT LOAD ERROR	The take-up reel has been rotating idly for a fixed period of time while the start/end processing operation during loading (half position) is being performed.	Stop (POWER OFF→ON)
E-52	W-UP REEL NOT ROTA	After the cassette has been inserted, the tape take-up reel has not wound up the tape while the total tape amount is not detected and while the tape is traveling.	Stop (POWER OFF→ON)
E-53	WINDUP ERROR	After the total tape amount has been detected, the amount of tape wound up on the take-up reel and the amount of tape supplied by the supply reel differ to an abnormal extent while the tape is traveling.	Stop (POWER OFF→ON)
E-55	UNLOAD ERROR	The tape has not been wound up during unloading.	Stop (POWER OFF→ON)
E-57	S-FF/REW TIMEOVER	The start/end processing operation is not completed even after 10 or more seconds have elapsed.	Stop (POWER OFF→ON)
E-59	DRUM ROTA TOO SLOW	The cylinder motor speed is abnormally low.	Stop (POWER OFF→ON)
E-60	DRUM ROTA TOO FAST	The cylinder motor speed is abnormally high.	Stop (POWER OFF→ON)
E-61	CAP ROTA TOO SLOW	The capstan motor speed is abnormally low.	Stop (POWER OFF→ON)
E-64	S REEL TOO FAST	The supply reel motor speed is abnormally high.	Stop (POWER OFF→ON)
E-67	T REEL TOO FAST	The tape-up reel motor speed is abnormally high.	Stop (POWER OFF→ON)
E-69	T REEL TORQUE ERR	An abnormal torque applied to the take-up reel motor is detected.	Stop (POWER OFF→ON)
E-70	S REEL TORQUE ERR	An abnormal torque applied to the supply reel motor is detected or if an abnormal current flowing to the current-sensing resistor is detected.	Stop (POWER OFF→ON)
E-71	CAP TENSION ERROR	An abnormal tension at the supply side is detected in the capstan mode.	Stop (POWER OFF→ON)
E-72	REEL TENSION ERROR	An abnormal tension at the supply side is detected in the reel mode.	Stop (POWER OFF→ON)
E-73	REEL DIR UNMATCH	The reel motor at the take-up side is running in the reverse direction.	Stop (POWER OFF→ON)
E-FF	E-FF	Tape start and end are detected simultaneously during loading or after loading is completed.	Stop (POWER OFF→ON)

RS-232C interface

1. Introduction

(1) The VTR can be operated by commands when the RS-232C interface is used.

(See command table on page 60 – 62.)

(2) Conditions for acknowledging commands from RS-232C interface

The front panel REMOTE/LOCAL switch must be at REMOTE.

The setup menu item No. 204 “RS232C SEL” must be ON.

If the above conditions are not met, [ACK] + [STX]ER001[ETX] is returned to the external unit.

Whether the [ACK] code is returned depends on the setting which has been selected for setup menu item No. 209 “RETURN ACK”.

2. Hardware specifications

External interface specifications

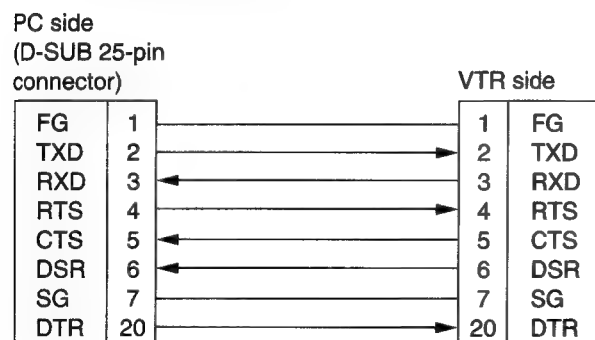
1) Connector specifications

Connector: D-SUB 25-pin (straight cable supported)

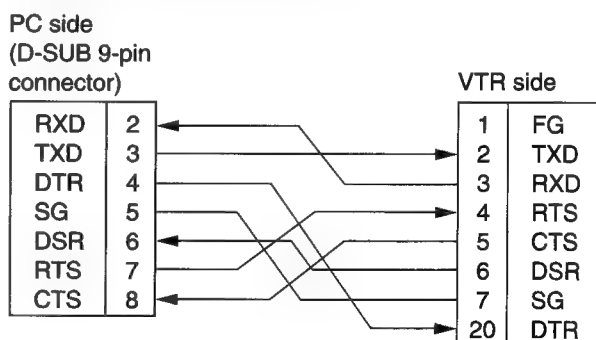
Pin No.	Signal	Circuit name	Description
1	FG	Protective ground	Frame ground
2	TXD	Transmitted data	Data is received from PC.
3	RXD	Received data	Data is sent to PC.
4	RTS	Request to send	Shorted with pin 5.
5	CTS	Clear to send	Shorted with pin 4.
6	DSR	Data set ready	+ voltage output after communication enable status
7	SG	Signal ground	Signal ground
20	DTR	Data terminal ready	No processing

2) Example of connection with controller (PC)

■ Using straight cable with D-SUB 25-pin connectors



■ Using straight cable with D-SUB 9-pin connectors and 25-pin connectors



RS-232C interface

3. Software specifications

Protocol

1) Communication parameters

Communication system	Asynchronous, full duplex
Communication speed	300/600/1200/2400/4800/ <u>9600</u>
Bit length	7 bit/ <u>8 bit</u>
Stop bit	<u>1 bit</u> /2 bit
Parity bit	<u>NONE</u> /ODD/EVEN
ACK code	ACK code returned/ <u>ACK code not returned</u> <Note> The ACK code is what is returned from the VTR to the controller when data has been successfully sent from the controller.

The underlining indicates the factory settings.

Any changes to the settings can be made using the setup menu items listed below.

Communication parameter	Setup menu item
Communication speed	No. 205 BAUD RATE
Bit length	No. 206 DATA LENGTH
Stop bit	No. 207 STOP BIT
Parity bit	No. 208 PARITY
ACK code	No. 209 RETURN ACK

2) Send format [controller (PC) → VTR]

■ Data format

[STX] [command] [:] [data] [ETX]

02h XX XX XX 3Ah XX-XX 03h ←(ASCII code: symbols, numbers upper-case letters)

20h<XX<7Fh

- [command]: Command identifier; a 3-byte identifier (ASCII code: symbols, numbers, upper-case letters) is sent as the command.
- [:]: This code serves as a delimiter between the command and data.
- [data]: Data (ASCII code: symbols, numbers, upper-case letters) can be added in the number of bytes required.

■ Outline of send procedure from controller

1. The send command starts with STX (start of text = 02h). The command is then identified by COMMAND which follows and the data is added as required.
The format ends with ETX (end of text = 03h).
2. When a different command is to be sent, a response is awaited from the VTR, and then the command is sent. (See page 59.)
3. If STX is sent again before ETX is sent, the receive data buffer inside the VTR is cleared. A command error is returned to the controller, and the data is newly processed with STX which was received again at the head.

3) Return format [VTR → controller (PC)]

The following responses are made to the command. If necessary, more than one response is made.

■ When the communication has terminated normally

1. The receive completion message is returned.

[ACK]

06h

2. The execution completion message is returned.

[STX] [command] [data] [ETX]

02h XX XX XX XX-XX 03h

- [command]: This is the message (data) which is returned or the execution completion message identifier.
- [data]: This is the data to be returned. It can be omitted.

Example: Send command Return message (data)
 [STX] OPL [ETX] → [ACK] [STX] OPL [ETX]

■ When the communication has terminated abnormally

[NACK]

15h

■ When processing is not possible due to incorrect data or trouble in the VTR

1. The receive completion message is returned.

[ACK]

06h

2. An error code is returned.

[STX] E R N₁ N₂ N₃ [ETX]

02h Error code 03h

4. Error code table

ER001: Invalid command

- Unsupported command received.
- Error in command execution

ER002: Parameter error

ER102: VTR mode error (front loading motor)

ER103: VTR mode error (loading motor)

ER104: VTR mode error (drum, capstan system)

ER105: VTR mode error (reel system)

ER106: VTR mode error (tension system)

ER108: VTR dew error

ER1FF: VTR system error

RS-232C interface

5. Command table

(1) Commands relating to operation control

<Notes>

- As for the return (completion) message, [ACK] is first returned when data is received, and the execution message is subsequently returned. It is only the execution message which is listed in this table.
- In the case of commands not listed in the table, ER001 (invalid command) is returned after [ACK] has been returned.

VTR operation	Send command	Return (completion) message	Supplementary notes
STOP	[STX] OSP [ETX]	[STX] OSP [ETX]	This command is for stopping the tape travel. The resulting output picture and sound statuses differ according to the settings selected for the setup menu No. 111 (STOP EE SEL).
EJECT	[STX] OEJ [ETX]	[STX] OEJ [ETX]	This command is for ejecting the cassette tape. The resulting output picture and sound statuses differ according to the settings selected for the setup menu No. 109 (EJECT EE SEL).
PLAY	[STX] OPL [ETX]	[STX] OPL [ETX]	This command is for starting playback.
REWIND	[STX] ORW [ETX]	[STX] ORW [ETX]	This command is for rewinding the tape. The resulting output picture and sound statuses differ according to the settings selected for the setup menu No. 110 (F/R EE SEL). The maximum tape speed differs according to the setting selected for setup menu No. 102 (FF. REW MAX).
FAST FORWARD	[STX] OFF [ETX]	[STX] OFF [ETX]	This command is for fast forwarding the tape. The resulting output picture and sound statuses differ according to the settings selected for the setup menu No. 110 (F/R EE SEL). The maximum tape speed differs according to the setting selected for setup menu No. 102 (FF. REW MAX).
REC*	[STX] ORC [ETX]	[STX] ORC [ETX]	This command is for starting the recording.
SHTL FORWARD	[STX] OSF:data [ETX]	[STX] OSF [ETX]	This is the forward direction shuttle command.
data = n: speed data 0: STILL 1: ×0.03 (DVCPRO), ×0.03 (DV, DVCAM) 2: ×0.1 (DVCPRO), ×0.1 (DV, DVCAM) 3: ×0.2 (DVCPRO), ×0.3 (DV, DVCAM) 4: ×0.5 (DVCPRO), ×0.5 (DV, DVCAM) 5: ×1 (DVCPRO), ×1 (DV, DVCAM) 6: ×1.85 (DVCPRO), ×1.85 (DV, DVCAM) 7: ×4.1 (DVCPRO), ×3.1 (DV, DVCAM) 8: ×9.5 (DVCPRO), ×9.5 (DV, DVCAM) 9: ×16 (DVCPRO), ×16 (DV, DVCAM) A: ×32 (DVCPRO), ×32 (DV, DVCAM)			: This speed differs according to the setting selected for setup menu No. 101 (SHTL MAX). : This speed differs according to the setting selected for setup menu No. 101 (SHTL MAX).

*Applicable only to AJ-D450.

VTR operation	Send command	Return (completion) message	Supplementary notes
SHTL REVERSE	[STX] OSR:data [ETX]	[STX] OSR [ETX]	This is the reverse direction shuttle command.
	data = n: speed data 0: STILL 1: $\times 0.03$ (DVCPRO), $\times 0.03$ (DV, DVCAM) 2: $\times 0.1$ (DVCPRO), $\times 0.1$ (DV, DVCAM) 3: $\times 0.2$ (DVCPRO), $\times 0.3$ (DV, DVCAM) 4: $\times 0.43$ (DVCPRO), $\times 0.5$ (DV, DVCAM) 5: $\times 1$ (DVCPRO), $\times 1$ (DV, DVCAM) 6: $\times 1.85$ (DVCPRO), $\times 1.85$ (DV, DVCAM) 7: $\times 4.1$ (DVCPRO), $\times 3.1$ (DV, DVCAM) 8: $\times 9.5$ (DVCPRO), $\times 9.5$ (DV, DVCAM) 9: $\times 16$ (DVCPRO), $\times 16$ (DV, DVCAM) : This speed differs according to the setting selected for setup menu No. 101 (SHTL MAX). A: $\times 32$ (DVCPRO), $\times 32$ (DV, DVCAM) : This speed differs according to the setting selected for setup menu No. 101 (SHTL MAX).		
STANDBY OFF	[STX] OBF [ETX]	[STX] OBF [ETX]	This command is setting the VTR to standby OFF.
STANDBY ON	[STX] OBN [ETX]	[STX] OBN [ETX]	This command is setting the VTR to standby ON.

RS-232C interface

(2) Commands relating to inquiries

<Notes>

- As for the return (completion) message, [ACK] is first returned when data is received, and the execution message is subsequently returned. It is only the execution message which is listed in this table.
- In the case of commands not listed in the table, ER001 (invalid command) is returned after [ACK] has been returned.

VTR operation	Send command	Return (completion) message	Supplementary notes
CTL/TC DATA REQUEST	[STX] QCD [ETX]	[STX] CD data [ETX]	This command is for inquiring about the counter value.
		data = f w gh mm ss ff f = F w = S gh = CTL: g = SP (20h): for a plus display – (2Dh): for a minus display h = 0 – 9: hours TC: gh = 00 – 23: hours mm = 00 – 59: minutes ss = 00 – 59: seconds ff = 00 – 29: frames	CTL or TC is returned, whichever corresponds to the front display mode.
STATUS REQUEST	[STX] QOP [ETX]	[STX] xxx [ETX]	This command is for inquiring about the VTR's operation mode.
		xxx = OEJ: EJECT OFF: FAST FORWARD OPL: PLAY ORC: REC ORW: REWIND OSP: STOP (including the STANDBY ON) SRS: (IN/OUT) PREROLL OBF: STANDBY OFF OSF: SHTL FORWARD OSR: SHTL REVERSE OJG: JOG FORWARD/REVERSE OSW: VAR FORWARD/REVERSE EAE: AUTO EDIT EON: EDIT ON (MANUAL EDIT) EPV: PREVIEW ERV: REVIEW	
ID (VTR No.) REQUEST	[STX] QID [ETX]	[STX] data [ETX]	This command is for inquiring about the VTR used.
		data = AJ-D440, AJ-D450	

(2) Commands relating to inquiries

<Notes>

- As for the return (completion) message, [ACK] is first returned when data is received, and the execution message is subsequently returned. It is only the execution message which is listed in this table.
- In the case of commands not listed in the table, ER001 (invalid command) is returned after [ACK] has been returned.

VTR operation	Send command	Return (completion) message	Supplementary notes
CTL/TC DATA REQUEST	[STX] QCD [ETX]	[STX] CD data [ETX]	This command is for inquiring about the counter value.
		data = f w gh mm ss ff f = F w = S gh = CTL: g = SP (20h): for a plus display – (2Dh): for a minus display h = 0 – 9: hours TC: gh = 00 – 23: hours mm = 00 – 59: minutes ss = 00 – 59: seconds ff = 00 – 24: frames	CTL or TC is returned, whichever corresponds to the front display mode.
STATUS REQUEST	[STX] QOP [ETX]	[STX] xxx [ETX]	This command is for inquiring about the VTR's operation mode.
		xxx = OEJ: EJECT OFF: FAST FORWARD OPL: PLAY ORC: REC ORW: REWIND OSP: STOP (including the STANDBY ON) SRS: (IN/OUT) PREROLL OBF: STANDBY OFF OSF: SHTL FORWARD OSR: SHTL REVERSE OJG: JOG FORWARD/REVERSE OSW: VAR FORWARD/REVERSE EAE: AUTO EDIT EON: EDIT ON (MANUAL EDIT) EPV: PREVIEW ERV: REVIEW	
ID (VTR No.) REQUEST	[STX] QID [ETX]	[STX] data [ETX]	This command is for inquiring about the VTR used.
		data = AJ-D440E, AJ-D450E	

(3) Microsoft QuickBASIC sample program

```
CLS
STX$ = CHR$(&H2): ETX$ = CHR$ (&H3): NAK$ = CHR$(15): ACK$ = CHR$(&H6)
PRINT "*** RS-232C COMMUNICATION SAMPLE PROGRAM ***"
PRINT "Type Command 'QUIT' to quit."
PRINT

REM *** Communication Port Initial & Open ***
REM Port 1,9600Bps,No parity,8 bit data,1 stop bit
OPEN "COM1:9600,N,8,1" FOR RANDOM AS #1 LEN = 256

REM *** Input Command & Send Command ***
SendCmd:
INPUT "Input Command ="; SEND$
IF SEND$ = "QUIT" THEN GOTO ProgEnd
PRINT #1, STX$ + SEND$ + ETX$

REM *** Wait for Receive Command ***
WHILE LOC(1) = 0
    WAITKEY$ = INKEY$
    IF WAITKEY$ = "Q" THEN PRINT "**** Quit ****": GOTO ProgEnd
WEND

REM *** Receive Command ***
RecvCmd:
RCV$ = INPUT$(1, #1)
IF RCV$ = STX$ THEN RCV$ = "[Stx]"
IF RCV$ = ACK$ THEN RCV$ = "[Ack]"
IF RCV$ = NAK$ THEN RCV$ = "[Nak]"
IF RCV$ = ETX$ THEN BUFFER$ = BUFFER$ + "[Etx]": GOTO DispOut
BUFFER$ = BUFFER$ + RCV$
GOTO RecvCmd

REM *** Output Receive Command ***
DispOut:
PRINT "Receive Command ="; BUFFER$
PRINT
BUFFER$ = ""
GOTO SendCmd

REM *** End Program ***
ProgEnd:
CLOSE
END
```

Connector signals

VIDEO IN

(AJ-D450 only)

SERIAL IN (DIGITAL)	BNC × 2	Active through (Option)
Y, P _B , P _R (ANALOG)	BNC × 3	
VIDEO IN	BNC × 2	Loop-through, 75Ω termination switch provided
REF VIDEO IN	BNC × 2	Loop-through, 75Ω termination switch provided
S1-VIDEO IN	4-pin × 1	

VIDEO OUT

SERIAL OUT (DIGITAL)	BNC × 3	(Option)
Y, P _B , P _R (ANALOG)	BNC × 3	
VIDEO OUT	BNC × 3	
S1-VIDEO IN	4-pin × 1	

AUDIO IN

(AJ-D450 only)

SERIAL IN (DIGITAL)	BNC × 2	(Option)
AUDIO IN (DIGITAL)	BNC × 1	CH1/CH2 AES/EBU format (Option)
AUDIO IN (ANALOG)	XLR × 2	CH1, CH2
TIME CODE IN	BNC × 1	

Pin No.	Signal
1	GND
2	HOT
3	COLD

AUDIO OUT

SERIAL OUT (DIGITAL)	BNC × 3	(Option)
AUDIO OUT (DIGITAL)	BNC × 1	CH1/CH2 AES/EBU format (Option)
AUDIO OUT (ANALOG)	XLR × 2	CH1, CH2
TIME CODE OUT	BNC × 1	
MONITOR OUT	PHONO × 1	
HEADPHONES (front)	1/4" phone × 1	

RS-422A REMOTE (9P)

RMOTE

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	FRAME GROUND	4	RECEIVE COMMON	7	TRANSMIT B
2	TRANSMIT A	5	—————	8	RECEIVE A
3	RECEIVE B	6	TRANSMIT COMMON	9	FRAME GROUND

Connector signals

VIDEO IN

(AJ-D450 only)

SERIAL IN (DIGITAL)	BNC × 2	Active through (Option)
Y, P _B , P _R (ANALOG)	BNC × 3	
VIDEO IN	BNC × 2	Loop-through, 75Ω termination switch provided
REF VIDEO IN	BNC × 2	Loop-through, 75Ω termination switch provided
S1-VIDEO IN	4-pin × 1	

VIDEO OUT

SERIAL OUT (DIGITAL)	BNC × 3	(Option)
Y, P _B , P _R (ANALOG)	BNC × 3	
VIDEO OUT	BNC × 3	
S1-VIDEO IN	4-pin × 1	

AUDIO IN

(AJ-D450 only)

SERIAL IN (DIGITAL)	BNC × 2	(Option)
AUDIO IN (DIGITAL)	BNC × 1	CH1/CH2 AES/EBU format (Option)
AUDIO IN (ANALOG)	XLR × 2	CH1, CH2
TIME CODE IN	BNC × 1	

Pin No.	Signal
1	GND
2	HOT
3	COLD

AUDIO OUT

SERIAL OUT (DIGITAL)	BNC × 3	(Option)
AUDIO OUT (DIGITAL)	BNC × 1	CH1/CH2 AES/EBU format (Option)
AUDIO OUT (ANALOG)	XLR × 2	CH1, CH2
TIME CODE OUT	BNC × 1	
MONITOR OUT	PHONO × 1	
HEADPHONES (front)	6.35 mm phone × 1	

RS-422A REMOTE (9P)

RMOTE

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	FRAME GROUND	4	RECEIVE COMMON	7	TRANSMIT B
2	TRANSMIT A	5	—————	8	RECEIVE A
3	RECEIVE B	6	TRANSMIT COMMON	9	FRAME GROUND

RS-232C REMOTE (25-pin D-SUB straight cable supported)

Pin No.	Abbreviation	Circuit	Description
1	FRAME GROUND	Protective ground	Frame ground
2	TxD	Transmitted data	Receives data from the PC.
3	RxD	Received data	Sends data to the PC.
4	RTS	Request to send	Shorted with pin 5.
5	CTS	Clear to send	Shorted with pin 4.
6	DSR	Data set ready	Positive power output after communication enable status
7	SG	Signal ground	Signal ground
20	DTR	Data terminal ready	No processing

ENCODER REMOTE (15P)

Pin No.	Signal	Pin No.	Signal	Pin No.	Signal
1	_____	6	SYSTEM H	11	RET GND
2	SET UP	7	SYS.SC COARSE (2)	12	_____
3	C LEVEL	8	-12V	13	_____
4	GND	9	HUE	14	SYS.SC FINE
5	+12V	10	VIDEO LEVEL	15	SYS.SC COARSE (1)

SECTION 2

SERVICE INFORMATION

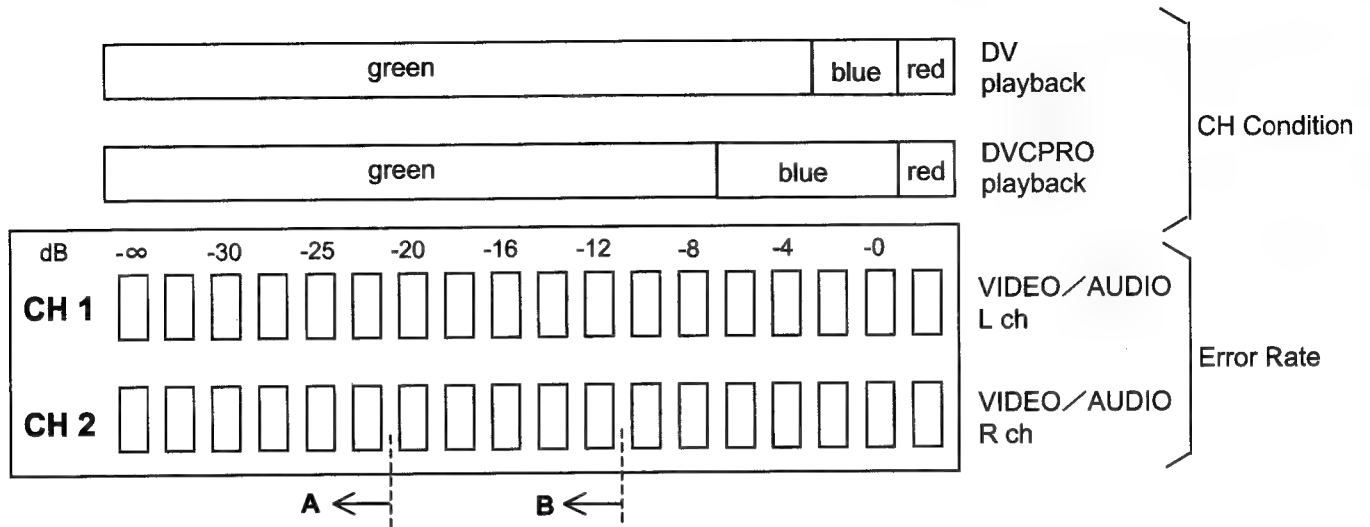
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1. ERROR RATE DISPLAY PROCEDURE

The error rate is displayed on the AUDIO LEVEL METER in Service menu mode.

(When enters in Service men mode, the AUDIO LEVEL METER changes into the error display mode automatically.)



When "CH1" lamp of AUDIO LEVEL METER lights :

The upper portion of Level Meter shows the error rate of "AUDIO Lch".

The lower portion of Level Meter shows the error rate of "AUDIO Rch".

When "CH2" lamp of AUDIO LEVEL METER lights :

The upper portion of Level Meter shows the error rate of "VIDEO Lch".

The lower portion of Level Meter shows the error rate of "VIDEO Rch".

Switching between AUDIO error mode and VIDEO error mode is enable by pressing the DIAG button in the pocket of front panel.

Set the item on EQ ADJUST menu as shown below

	MENU	DVC PRO (PB)	DV (R/P)
C22	ECC MODE	AL OFF	AL OFF
C23	CONCEALMODE	AFF	OFF
C24	VITABI MODE	AUTO	ON
C25	PB MODE	PB H	RP H
C26	ERROR MODE	SLOW	SLOW

Note: With above contents set automatically, when set the error rate display mode during normal operation.

※ Please refer to condition of the error rate follow the tape format and VTR mode, indicated as below.

	VTR mode	Standard of Error Rate
DVCPRO (PB)	Alignment tape playback	Under the "A" position at level meter
DV (R/P)	Alignment tape playback	Under the "B" position at level meter

2. Service Menu Information

< Operation Procedure >

- (1) The "REMOTE/LOCAL" switch set to "LOCAL" on the front panel.
- (2) Press the MENU button, then the Set up menu on the TV monitor.
- (3) Keep holding press the EJECT button and STOP button, press the MENU button, then appeared Main menu of Service menu on the screen as indicated as below.

SERVICE-MENU	
No. A00	
* A00	: SERVO ADJUST
B00	: EQ ADJUST
C00	: RF ADJUST
D00	: VIDEO ADJUST
E00	: AUDIO ADJUST
F00	: BACKUP RAM INIT
END	

MAIN Menu

- (4) Move the star mark "*" by "▼" or "▲" button on the front panel for select the each Adjustment menu.
- (5) Press the SET button, then open the Adjustment Menu follow the selected item (A00 to H00) on the Main menu.
- (6) Each Adjustment item are selected by. "▼" or "▲" button.
- (7) For change the value or setting, press the "◀" or "▶" button.(same way of SET UP menu).

< KEY function for Service Menu >

- [MENU button] : ①. Keep pressing EJECT and STOP button, press MENU button, then move to Main menu on Service menu from SET UP menu.
- ②. Move to Main menu from ADJUST menu on the Service menu
- ③. Move to SET UP menu from Main menu on Service menu.
- [SET button] : ①. Move to ADJUST menu from Main menu on Service menu.
- [▲] : ①. Move the cursor "*" for select the each item (cursor move to up direction).
- [▼] : ①. Move the cursor "*" for select the each item (cursor move to down direction).
- [◀] : ①. Change the numerical value or setting value of each item on ADJUST menu.
 (decrease adjustment value)
- [▶] : ①. Change the numerical value or setting value of each item on ADJUST menu.
 (Increase adjustment value)

< Store the adjustment and setting value to the memory >

When menu is escape from Adjustment menu to Main menu by press MENU button, each data write to the memory.

The contents of each "Adjustment menu" which are described on behind page.

Press the MENU button on the Main menu condition, then escape from Service menu mode.

A00:SERVO ADJUST

No.	ITEM	SETTING VALUE	CONTENTS OF SETTING and ADJUSTMENT	REMARK
A01	PG SHIFTER	0~ 1649 ~4095 0~ 1649 ~4095	(RISE display) PG SHIFTER AUTO ADJ (FALL display).	Elec. Adj
A02	T TORQUE	-128~ 0 ~+127 Initial:0	Correct the offset value of T REEL MOTER DRIVE	Elec. Adj
A03	S TORQUE	-128~ 0 ~+127 Initial:0	Correct the offset value of S REEL MOTER DRIVE	Elec. Adj
A04	PB GAIN P	-128~- 1 ~+127	LISTA SENSITIVITY Adj. (PB HEAD)	LISTA
A05	PB LINEAR P	0 1 ON	LISTA LINEARITY Adj. (PB HEAD)	LISTA
A06	RP GAIN P	-128~- 1 ~+127	LISTA SENSITIVITY Adj. (R/P HEAD)	LISTA
A07	RP LINEAR P	0 1 ON	LISTA LINEARITY Adj. (R/P HEAD)	LISTA
A08	RP GAIN	-128~- 1 ~+127	LISTA CONSUMER DV COMPATIBILITY CONFIRMATION	LISTA
A09	RP LINEAR	0 1 ON	LISTA CONSUMER DV LINEARITY Adj.	LISTA
A10	MOTOR CHECK	0 OFF 1 CAP 2 DRUM 3 T REEL 4 S REEL		* NOT USED

B00:EQ ADJUST

Note: The mark “●” indicated as common adjustment item for DVCPRO and DV.

NO	ITEM	SETTING VALUE	CONTENTS OF SETTING and ADJUSTMENT	REMARK
B01	PB PLL PHASE	-128~- 40 ~+127	PB PLL PHASE Adj. ●	Elec. Adj
B02	PB PLL SLICE	-128~- 70 ~+127	PB PLL SLICE LEVEL Adj. ●	Elec. Adj
B03	PB AEQ	-128~- 75 ~+127	PB AUTO EQ Adj. ●	Elec. Adj
B04	PB GAIN L	-128~- 30 ~+127	PB Lch EQ GAIN Adj. ●	Elec. Adj
B05	PB PHASE L	-128~- 55 ~+127	PB Lch EQ PHASE Adj. ●	Elec. Adj
B06	PB GAIN R	-128~- 30 ~+127	PB Rch EQ GAIN Adj. ●	Elec. Adj
B07	PB PHASE R	-128~- 55 ~+127	PB Rch EQ PHASE Adj. ●	Elec. Adj
B08	RP PLL PHASE	-128~- 50 ~+127	RP PLL PHASE Adj.	Elec. Adj
B09	RP PLL SLICE	-128~- 70 ~+127	RP PLL SLICE LEVEL Adj.	Elec. Adj
B10	RP AEQ	-128~- 75 ~+127	RP AUTO EQ Adj.	Elec. Adj
B11	RP GAIN L	-128~- 30 ~+127	RP Lch EQ GAIN Adj.	Elec. Adj
B12	RP PHASE L	-128~- 55 ~+127	RP Lch EQ PHASE Adj.	Elec. Adj
B13	RP GAIN R	-128~- 30 ~+127	RP Rch EQ GAIN Adj.	Elec. Adj
B14	RP PHASE R	-128~- 55 ~+127	RP Rch EQ PHASE Adj.	Elec. Adj
B15	VTB PHASE 1	-128 <u>+127</u>	VITABI A/D CLOCK PHASE Adj. (LSB)	
B16	VTB PHASE 2	-128 <u>+127</u>	VITABI A/D CLOCK PHASE Adj.	
B17	VTB PHASE 3	-128 <u>+127</u>	VITABI A/D CLOCK PHASE Adj. (MSB)	
B18	VTB PHS FINE	-128~-1~+127	VITABI A/D CLOCK PHASE ADJ. (FINE Adj.)	
B19	PB MAIN DL	-128~- 40 ~+127	PB EQ DELAY LINE Adj. ●	Elec. Adj
B20	RP MAIN DL	-128~- 40 ~+127	RP EQ DELAY LINE Adj.	Elec. Adj
B21	PB PLL VCO	-128~- 66 ~+127	PB PLL VCO Adj.	
B22	RP PLL VCO	-128~- 66 ~+127	RP PLL VCO Adj.	
B23	VTB GAIN	-31~- 15 ~+32	VITABI A/D INPUT LEVEL Adj. ●	Elec. Adj
B24	ECC MODE	<u>0 ALL ON</u> 1 OT OFF 2 AL OFF	ERROR CORRECTION INNER ON/OUTER ON ERROR CORRECTION INNER ON/OUTER OFF ERROR CORRECTION INNER OFF/OUTER OFF	
B25	CONCEAL MODE	<u>0 ON</u> 1 OFF	ERROR CONCEALMENT ON ERROR CONCEALEMENT OFF ※This CONCEAL MODE function is only effective, when the above ECC MODE set to "ALL ON".	
B26	VITABI MODE	<u>0 AUTO</u> 1 ON	VITABI ON VITABI ON	

		2 OFF	VITABI OFF	
B27	PB MODE	0 <u>PB H</u> 1 RP H	FORCED PB HEAD PLAYBACK FORCED RP HEAD PLAYBACK	
B28	ERROR MODE	0 <u>FAST</u> 1 SLOW	ERROR DISPLAY MODE "FAST" ERROR DISPLAY MODE "SLOW"	
B29	EQ AUTO ADJ	0 <u>STOP</u> 1 START	PB EQUALIZER AUTO Adj.	*NOT USED
B30	DEFAULT	0 LOAD 1 SAVE	LOAD THE FACTORY ADJUSTMENT VALUE SAVE THE ADJUSTMENT VALUE	

「 How to LOAD or SAVE the adjustment value 」

NOTE: This item (B30) is only active on the tape pass condition.

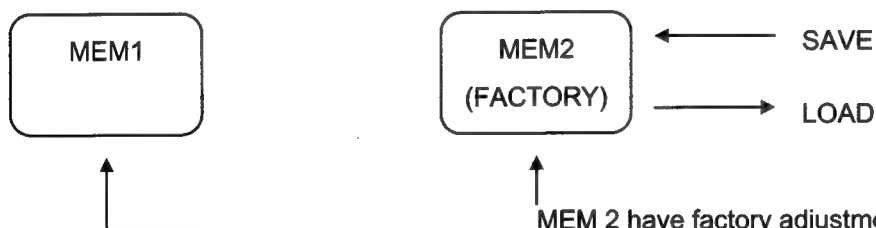
1. Press the SET button , the appear the message as indicated as below.

* SAVE
LOAD
END

2. Set the cursor "*" to SAVE or LOAD and press the SET button, then execute the program.

If cancel default screen without execute SAVE or LOAD operation, press menu button.

NOTE: 1. The VTR have two memory area for the adjustment value as indicated as below.



MEM1 is always renewed follow the adjustment value on the RF and EQ adjustment menu.

2. We recommended the SAVE function does not use on the market, because the renewed adjustment value is stored to MEM 1 automatically.

C00:RF ADJUST

NO	ITEM	SETTING VALUE	CONTENTS OF SETTING and ADJUSTMENT	REMARK
C01	REC CURR L	-128~0~+127	SETTING OF REC CURR (RP Lch)	Elec. Adj
C02	REC FREQ L	-128~0~+127	SETTING OF REC FREQ (RP Lch)	Elec. Adj
C03	REC CURR R	-128~0~+127	SETTING OF REC CURR (RP Rch)	Elec. Adj
C04	REC FREQ R	-128~0~+127	SETTING OF REC FREQ (RP Rch)	Elec. Adj
C05	RE CURR L	-128~0~+127	SETTING OF ERASE CURR (RE Lch)	Elec. Adj
C06	RE CURR R	-128~0~+127	SETTING OF ERASE CURR (RE Rch)	Elec. Adj
C07	RP PHASE L	-128~0~+127	RP Lch PLAYBACK PHASE CORRECTION	
C08	RP PHASE R	-128~0~+127	RP Rch PLAYBACK PHASE CORRECTION	
C09	RP MAG L	-128~0~+127	RP Lch PLAYBACK OUTPUT GAIN CORRECTION	
C10	RP MAG R	-128~0~+127	RP Rch PLAYBACK OUTPUT GAIN CORRECTION	
C11	PB PHASE L	-128~0~+127	PB Lch PLAYBACK PHASE CORRECTION	
C12	PB PHASE R	-128~0~+127	PB Rch PLAYBACK PHASE CORRECTION	
C13	PB MAG L	-128~0~+127	PB Lch PLAYBACK OUTPUT GAIN CORRECTION	
C14	PB MAG R	-128~0~+127	PB Rch PLAYBACK OUTPUT GAIN CORRECTION	
C15	REC SIG	<u>0 NORMAL</u> 1 CW		* NOT USED
C16	ECC MODE	<u>0 ALL ON</u> 1 OT OFF 2 AL OFF		
C17	CONCEAL MODE	<u>0 ON</u> 1 OFF		
C18	VITERBI MODE	<u>0 AUTO</u> 1 ON 2 OFF		
C19	PB MODE	<u>0 PB H</u> 1 RP H		
C20	ERROR MODE	<u>0 FAST</u> 1 SLOW	ERROR RATE INDICATION FAST ERROR RATE INDICATION SLOW	
C21	TRACKING MOD	<u>0 ATF</u> 1 CTL	SELECTION OF TRACKING CONTROL MODE * This function is only active on the service Menu mode.	
C22	TRACKING VAL	-128~0~+127 Initial: 0	" IN CASE OF SELECT THE CTL MODE ON ABOVE ITEM C20, TRACKING VALUE IS ADJUSTABLE" * TRACKING VALUE RANGE DATA 0 - 116 : RELATIVE TO 1 TRACK THEREFORE 0 TO 127 IS RELATIVE TO JUST OVER 18 um	
C23	REC OPTIMAIZ	<u>0 STOP</u> 1 START		* NOT USED
C24	DEFAUT	0 LOAD 1 SAVE	LOAD THE FACTORY ADJUSTMENT VALUE SAVE THE ADJUSTMENT VALUE	

D00:VIDEO ADJUST

NO	ITEM	SETTING VALUE	CONTENTS OF SETTING and ADJUSTMENT	REMARK
D01	VIDEO BLANK	<u>0 NORMAL</u> 1 OFF	NORMAL : The video signal is blanked at video edge portion for protect the overshoot. OFF : Release the blanking function.	ELEC. ADJ.
D02	V IN PLL	<u>0 OFF</u> 1 ON		*AJ-450 only
D03	VIDEO MUTE	<u>0 NORMAL</u> 1 MUTE		
D04	SELF DUB GEN	<u>0 OFF</u> 1 3RD 2 10TH		*AJ-D450 only * NOT USED
D05	DUBBING MODE	<u>0 FREEZE</u> 1 REPEAT		*AJ-D450 only * NOT USED
D06	EE TEST MODE	<u>0 NORMAL</u> 1 DCI RT		*AJ-D450 only
D07	HEAD SELECT	<u>0 PB. REC</u> 1 PB 2 REC. PB 3 REC	PRIOR TO PB HEAD FORCED PB HEAD PRIOR TO REC HEAD FORCED REC HEAD	
D08	V SETUP	<u>0 OFF</u> 1 ON	VALID / INVALID SELECTION FOR SETUP MENU 613 : VIN SETUP AND 614 : VOUT SETUP 0 : SETUP MENU 613/614 NO DISPLAY 1 : SETUP MENU 613/614 DISPLAY	*AJ-D450 only =NTSC ONLY=
D12	VLOCK DET	<u>0 OFF</u> 1 ON	SET THE MUTE FUNCTION OPERATED OR NOT, WHEN VIDEO INPUT SIGNAL IS BECOME ABNORMAL. 0 : MUTE IS NOT OPERATED 1 : MUTE IS OPERATED	*AJ-D450 only =NTSC ONLY=

E00:AUDIO ADJUST

NO.	ITEM	SETTING VALUE	CONTENTS OF SETTING and ADJUSTMENT	REMARK
E01	MASTER REF	0 FS-20 1 FS-18	Select the position of " Reference level marker " on the Audio level Meter (CH1, CH2, CUE). 0: Set to -20dB position (For NTSC) 1: Set to -18dB position (For PAL)	
E04	LINE OUT CUE	<u>0</u> OFF 1 ON	SELECT THE CUE AUDIO SIGNAL OUTPUT FROM LINE OUT TERMINAL(CH1/CH2) COMPULSORY. 0: NORMAL MODE SELECTION OF AUDIO OUTPUT SIGNAL (PCM OR CUE) BY SET UP MEMU(721:LINE CH SEL). 1: CUE SIGNAL OUTPUT	

3. HOW TO RESET THE HOUR METER

- (1) When the DIAG button is pressed, VTR information is displayed. When DIAG button is pressed again, the original display is restored.
- (2) There are two type of information : "HOUR METER" information and "WARNNING" information. Switching between these type is enabled by pressing cursor buttons (◀) and (▶).
- (3) Indicated on the "HOUR METER" screen are the power on time (OPERATION), drum rotation time (DRUM RUN), tape travel time(TAPE RUN), loading count (THREADING). The HOUR METER information appear on the screen as indicated as below.

DIAG-MENU	HOUR METER
* H00 : OPERATION	200H
H01 : DRUM RUN	50H
H02 : TAPE RUN	30H
H03 : THERADING	100T
H11 : DRUM RUN r	50H
H12 : TAPE RUN r	30H
H13 : THERADING r	100T

«How to Reset»

DRUM RUN, TAPE RUN and THREADING information can be reset individually.

- (1) Set the Dip SW501-1 on the SYSCON(F2) P.C.Board to ON position.
- (2) In EJECT mode, set the cursor "*" to the indicated "r" mark item(item 11,12 or 13) by pressing the cursor buttons (▲ or ▼). And press "RESET" button, then the following message appears on the screen.

<p>HOURS METER INIT SET</p> <p>DRUM RUN r OK? YES <PLAY> NO <STOP></p>

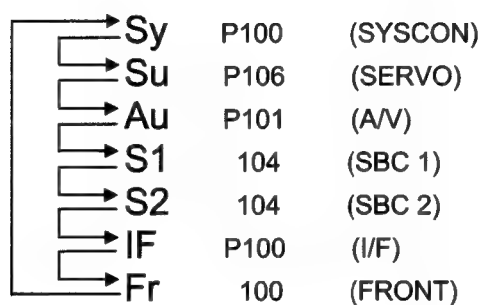
- * When press the "PLAY" button, then execute the reset function.
- * When press the "STOP" button, then cancel the reset command.

4. HOW TO CONFIRM THE SOFTWARE VERSION

1. Turn on the power.
2. Press the EJECT button.
3. Press the PLAY and STOP button simultaneously, then displayed the soft version on the counter display of the front panel.

<example> **Fr P100**

4. Press the PLAY and STOP button repeatedly, change the display of all soft version in order as indicated as below.



ROM location indicated as below table

Name	Reference number and Board
SYSCON	IC2 (SYSCON Board)
SERVO	IC235 (SERVO Board)
A/V	IC702 (A/V Board)
SBC 1	IC870 (REC PB Board)
SBC 2	IC910 (REC PB Board)
I/F	IC503 (SYSCON Board)
FRONT	IC2 (FRONT CPU Board)

5. Replacement Procedure of the P. C. Board

Please refer to below table, It indicated as which board is necessary adjustment after board exchanged. And perform the adjustment follow the adjustment procedure on this manual.

	Board	Adj.		Board	Adj.		Board	Adj.
F1	SERVO	○	F5	REC PB	○	H2	CUE	○
F2	SYSCON	○	F6	* V IN	○	H3	EQ	○
F3	SIF(Optional)	----	F7	A PROC	×	H4	RF AMP	○
F4	V OUT	○	F8	ADDA	○	----	HEAD BUFF	×

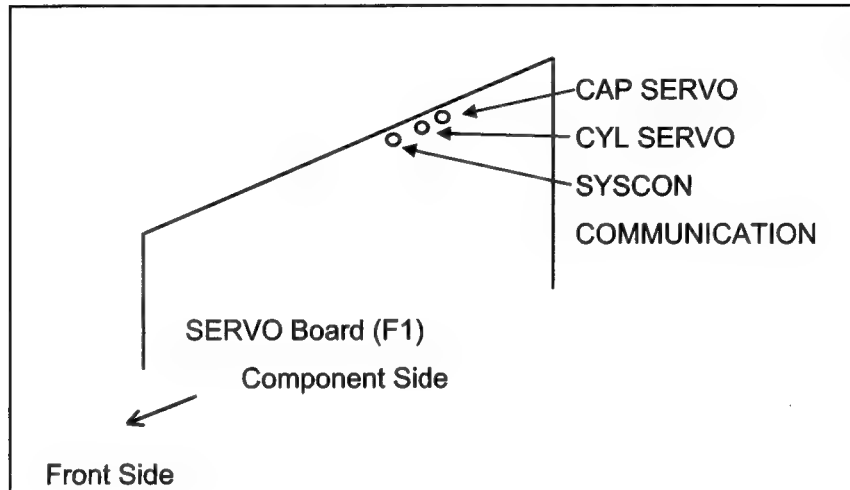
*** NOTE:** AJ-D450 only

1. If there is a ROM on P.C.Board, please confirm the software version. Refer to confirmation procedure of software version on previous page.
2. The DATA RAM(IC17) is installed on SYSCON Board and it data can not saved to other equipment.. When SYSCON Board exchanged, remove the IC17 on original Board and put it to New Board. Another way of move the data, write down all of User data, Service data and numerical value of Hour Meter and input the data to new RAM. But numerical value of Hour Meter can not input to VTR (Hour Meter information will be reset).

6. SERVO LED INFORMATION

SERVO LED light on Front Panel, when Cylinder and Capstan Servo are locked. In case of SERVO LED does not light on PLAY or REC condition, please check at LED condition on Servo P.C.Board for confirm the which Servo is faulty.

There are condition LED on the SERVO Board (F1) as follows.



- The LED nearest to front side light up, when Syscon CPU and SERVO CPU communication is correct.
- The center LED light up, when the cylinder servo is locked.
- The LED nearest to the Jack Board light up, when the capstan servo is locked.

Note: In case of capstan servo does not locked, please use function of Tracking mode selection on Service menu for confirm which servo is fault ATF or CTL.

7. Auto Off Error Message

In case of AUTO OFF Error is occurred, error number flashed on counter display of front panel and error message appear on the monitor screen(superimpose on VIDEO 3 OUT).

The number of below table indicates as priority display of error number and message, when some error occurred at the same time. Error message indicates under error number on below table.

No.	Display (20 characters)	Contents	VTR Operation	Detection Place	Reset Condition
1	Normal (EJECT)	After a cassette insertion, if cassette does not down within 6 seconds, VTR goes to EJECT mode.	EJECT	SYSCON	---
	E-29 (FRONT LOAD MOTOR)	After EJECT mode, if a cassette does not up within 6 seconds, error number flashed.	STOP	SYSCON	POWER OFF → ON
2	Normal (EJECT)	Loading is not completed within 6 seconds, VTR goes to EJECT mode (unloading mode).	EJECT	SYSCON	---
	E-31 (LOADING MOTOR)	When unloading is not completed within 6 seconds, error number flashed.	STOP	SYSCON	POWER OFF → ON
3	E-35 (SERVO CONTORL ERR)	If servo CPU does not respond within 1 seconds, error number flashed. <Actual Judgment> System control circuit sends COMM_TEST signal to Servo circuit and Servo circuit returns COMM_TEST_RET signal. If this signal is not returned within 1 seconds, "AUTO OFF" process is produced and Servo is reset for 50 ms.	STOP	SYSCON	POWER OFF → ON
4	E-36 (SERVO ERROR)	If only the Servo CPU perform reset operation by momentary power off, "AUTO OFF" occurred and error number flashed.	STOP	SYSCON	POWER OFF → ON

5	E-37 (SERVO COMM ERROR)	If Servo CPU does not response to command from SYSCON CPU during 10 second error number flashed.	STOP	SYSCON	POWER OFF → ON
6	E-51 (FRONT LOAD ERROR)	If Supply Reel Table rotated over time at Tape big./ end detected operation during Front loading, error number flashed.	STOP	SERVO	POWER OFF → ON
7	E-52 (W-UP REEL NOT ROTA)	When Capstan shaft send the tape 3 cm, Take-up reel FG count number is less than regulation value.	STOP	SERVO	POWER OFF → ON
8	E-53 (WINDUP ERROR)	Compare the tape movement between take up and supply reel, and if the difference is more than 2 cm, goes to "AUTO OFF" mode.	STOP	SERVO	POWER OFF → ON
10	E-55 (UNLOAD ERROR)	Reel does not wind the tape in the unloading mode. Reel FG is counted in each mechanism mode.	STOP	SERVO	POWER OFF → ON
12	E-57 (S-FF/REW TIME/OVER)	Reel operation does not finish at Tape beginning and end position.	STOP	SERVO	POWER OFF → ON
14	E-59 (DRUM ROTATE TOO SLOW)	Cylinder rotary speed is too slow. In the cylinder on mode, cylinder PG interval is more than 1.5 ms for 5 seconds or cylinder PG is not detected for 1 seconds.	STOP	SERVO	POWER OFF → ON
15	E-60 (DRUM ROTAE TOO FAST)	Cylinder rotary speed is too fast. PG interval is less than 3 ms for 2 seconds.	STOP	SERVO	POWER OFF → ON
16	E-61 (CAP ROTATE TOO SLOW)	Capstan rotary speed is too slow. In the capstan on mode, capstan FG is not detected for 5 seconds.	STOP	SERVO	POWER OFF → ON

19	E-64 (S REEL ROTATE TOO FAST)	S-REEL Rotation speed became too high more than 2 seconds.	STOP	SERVO	POWER OFF → ON
22	E-67 (T-REEL ROTA TOO FAST)	T-REEL Rotation speed became too high more than 2 seconds.	STOP	SERVO	POWER OFF → ON
24	E-69 (T-REEL TORQUE ERROR)	In the Reel mode, exceed reel torque, caused by tape run over load, is detected. If the T Reel Torque error voltage is more than 0.5V continuously, goes to Auto Off mode within 105 seconds.	STOP	SERVO	POWER OFF → ON
25	E-70 (S-REEL TORQUE ERROR)	In the Reel mode, exceed reel torque, caused by tape run over load, is detected. If the S Reel Torque error voltage is more than 0.5V continuously, goes to Auto off mode within 105 seconds or Over current flow to Reel Motor more than 0.55A for 2 seconds.	STOP	SERVO	POWER OFF → ON
26	E-71 (CAP TENSION ERROR)	Tension error is detected in capstan mode. Tension sensor voltage (SERVO : TP201) is more than 4.7 V or less than 0.3 V for 2 seconds.	STOP	SERVO	POWER OFF → ON
27	E-72 (REEL TENSION ERROR)	Tension error is detected in Reel mode. Tension sensor voltage (SERVO : TP201) is more than 4.7 V or less than 0.3 V for 2 seconds.	STOP	SERVO	POWER OFF → ON
28	E-73 (REEL DIR UNMATCH)	Take up Reel direction error is detected. Rotation of Take-up reel in opposite direction has continued through complete turn except speed 0 (stop)	STOP	SERVO	POWER OFF → ON

40	E-20 (DEW)	<p>If the condensation has formed inside the VTR, error number flushed, then VTR goes to Eject mode.</p> <p><Reset Condition></p> <p>After the cassette is ejected, Drum rotated to dry out the condensation.</p> <p>When condensation has been removed, message is cleaned and normal operation is enable.</p> <p>NOTE:</p> <p>1) Drum rotated, when the condensation is detected inside the VTR.</p> <p>2) If the condensation is detected, when insert the cassette to VTR.</p>	EJECT	SYSCON	AFTER CONDEN- -SATION is REMO- VED Refer to CON- TENTS
41	E-FF (E-FF)	The tape beginning and end position are detected simultaneously during loading or after loading completed mode.	STOP	SYSCON	POWER OFF → ON

※ Other Operation.

- 1) If the Reel Base unit does not move to prescribed position within 3 seconds, Reel Motor goes to stop and the cassette is ejected.

8. AUTO OFF Check Point Table

Message	Check Point
WINDUP_REEL_NOT_ROT	<p>Check the loosen of the tape before power on.</p> <ul style="list-style-type: none"> ● S Reel side before capstan motor → S Reel side is abnormal at REV mode. ● T Reel side after capstan motor → T Reel side is abnormal at FWD mode <p>1. Check the dead point of Reel Motor in the Reel Torque Offset Adjustment mode (Service menu mode).</p> <p>[In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Check Servo board <p>Motor Drive circuit (F1 board)</p> <p>TRH±1,2,3, SHR±1,2,3--- Fig. 1</p> <p>TRM1,2,3, SRM1,2,3 --Fig. 2</p> <ul style="list-style-type: none"> ● Check Reel Motor <p>Replace Reel Motor</p> <p>2. Check Reel Brake Solenoid</p> <p>(Check the Reel Brake is smoothly released in the Reel Torque Offset Adjustment mode.)</p> <p>[In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Check System Control board (F2 board) <p>Solenoid Drive circuit</p> <p>S_BRAKE_N, T_BRAKE_N --- Fig. 3</p> <p>3. Grease is not attached on the tape pass.</p>

WINDUP_ERROR		<ol style="list-style-type: none"> 1. Check the tension is normal. <ul style="list-style-type: none"> ● Check Spring power --- Refer to the specification of Tension Regulator Spring Adjustment ● Check Tension Voltage --- Refer to the Tension Voltage Check 1 Refer to the Tension Control Check. 2. Check the FG waveform is normal. <ul style="list-style-type: none"> Capstan FG --- Refer to Capstan FG Check 1 and Capstan FG Check 2 Reel FG --- Refer to Reel FG Check 1 and Reel FG Check 2 3. Check Reel Offset Torque --- Refer to Motor Torque Offset Adjustment. 4. Check Tape Pass Load 5. Check Tape Damage
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UNLOAD_ERROR	Check the tape is surely wound.	<p>1. Check dead point of Reel Motor in the Reel Torque Offset Adjustment mode (Service menu mode). [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <p>Check Motor Drive circuit (F1 board)</p> <p>TRH±1,2,3, SHR±1,2,3--- Fig. 1</p> <p>TRM1,2,3, SRM1,2,3 ---Fig. 2</p> <ul style="list-style-type: none"> ● Check Reel Motor <p>Replace Reel Motor.</p> <p>2. Check Reel Torque Offset [In case of abnormal condition]</p> <p>Re-adjustment --- Motor Torque Offset Adjustment</p> <p>3. Check Reel Brake Solenoid (Check the Reel Brake is smoothly released in the Reel Torque Offset Adjustment mode.)</p> <p>[In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Check System Control board (F2 board) <p>Solenoid Drive circuit</p> <p>S_BRAKE_N, T_BRAKE_N --- Fig. 3</p> <p>4. Check Reel FG</p> <p>Reel FG --- Refer to Reel FG Check 1 and Reel FG Check 2</p>
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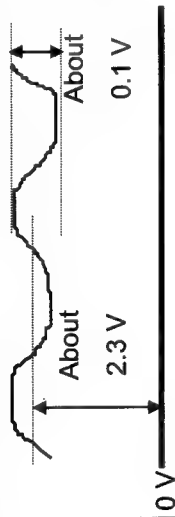

S_FF/REW_TIMEOVER	Check the problem occurred at tape beginning or tape, or other portion.	<p>1. Check Reel FG Reel FG --- Refer to Reel FG Check 1 and Reel FG Check 2 [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Reel FG Sensor, Reel Replacement ● Check F1 board. <p>2. Check transparent tape detection. [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Replace sensors. ● Check F2 board. <p>3. Check the tape is not bent.</p>
S_REEL_ROTA_TOO_FAST		<p>1. Check Reel FG waveform. Reel FG --- Refer to Reel FG Check 1 and Reel FG Check 2 [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Reel FG Sensor, Reel Replacement ● Check F1 board. <p>2. Check Reel Drive circuit. TP450 and TP451 on F1 board --- less than 0.4 V</p>

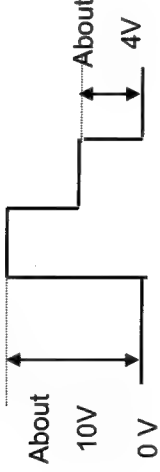
T_REEL_ROTA_TOO_FAST		<p>1. Check Reel FG waveform. Reel FG --- Refer to Reel FG Check 1 and Reel FG Check 2 [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Reel FG Sensor, Reel Replacement ● Check F1 board. <p>2. Check Reel Drive circuit. TP450 and TP451 on F1 board --- less than 0.4 V</p>
T_REEL_TORQUE_ERROR		<p>1. Check Reel Torque Offset [In case of abnormal condition] Re-adjustment --- Motor Torque Offset Adjustment</p> <p>2. Check Reel Brake Solenoid (Check the Reel Brake is smoothly released in the Reel Torque Offset Adjustment mode.) [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector <p>Mech I/F board, Mother board</p> <ul style="list-style-type: none"> ● Check System Control board (F2 board) Solenoid Drive circuit <p>S_BRAKE_N, T_BRAKE_N --- Fig. 3</p>

S_REEL_TORQUE_ERROR		<p>1. Check Reel Torque Offset [In case of abnormal condition] Re-adjustment --- Motor Torque Offset Adjustment</p> <p>2. Check Reel Brake Solenoid (Check the Reel Brake is smoothly released in the Reel Torque Offset Adjustment mode.) [In case of abnormal condition]</p> <ul style="list-style-type: none"> ● Check loosen of connector ● Mech I/F board, Mother board ● Check System Control board (F2 board) <p>Solenoid Drive circuit S_BRAKE_N, T_BRAKE_N --- Fig. 3</p>
DRUM_ROTATE_TOO_FAST		<p>Check Cylinder PG Check Cylinder FG [In case of fast rotation]</p> <ul style="list-style-type: none"> ● Check Cylinder flexible cable, connectors. ● Check CYL_ERR (TP400) voltage. <p>Normal Rotation : TP400 = about 2.5 V During Full Acceleration : TP400 = 0 V EJECT mode : TP400 = 2.5 V Servo REF (IC207-2 pin) = about 2.5 V fix If above voltage is incorrect, servo board is not correct.</p> <p>[In case of FG is correct and PG is incorrect] PG signal flow is incorrect. (Cylinder >> Mech I/F >> Mother >> Servo)</p>

<p>DRUM_ROTATE_TOO_SLOW</p>	<p>Check that the tape is stick with the Cylinder. Check that the tape is stick with a part of the tape pass and it causes the high tension. In this case tape may brake the Cylinder rotation.</p>	<p>Check Cylinder PG Check Cylinder FG [In case of FG is correct and PG is incorrect] PG signal flow is incorrect. (Cylinder >> Mech I/F >> Mother >> Servo) [In case of both PG and FG are incorrect (Cylinder rotation is actually slow.)] (1) Check Cylinder Unit. Rotate the Cylinder in EJECT or UNLOAD condition. Check that the Cylinder smoothly rotate. If it is not smooth, the Cylinder unit is incorrect. (2) Check the rotary speed detection. Check that the CYL_FG_PRE (TP231) shows the pulse which is 4 pulses per rotation and the duty is 50 %, 0V/5V. If it is incorrect, FG signal flow is incorrect. (3) Check the Servo CPU outputs acceleration command. ● Check that acceleration voltage (less than 2.5 V) is output at CYL_ERR (TP400). ● Check that drive on signal which is 5 V at IC400-4 pin. when it is 2.5 V, it is OFF mode. (4) Check the Reference voltage. Check that SERVO_REF (IC207-2 pin) voltage is about 2.5 V. -> If (3) or (4) is incorrect, surround circuit of CPU, D/A is incorrect. (5) Check that Power Supply voltage. Check that Drive IC voltage (VCC 5V : IC400-27 pin) and Motor Drive voltage CYL_VM (Q400 -1 or 8 pin). The VM is positive voltage during Cylinder ON. → If it is correct, between Motor Drive and Cylinder is incorrect. Check connectors of Cylinder, Mech I/F and Mother.</p>
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CAP_ROTATE_TOO_SLOW	<p>Check the tape is not stacked with the tape pass and tension is not high. Check the mechanical load of Capstan.</p>	<p>Refer to Capstan FG check (1) and (2).</p> <ul style="list-style-type: none"> ● In case of the Capstan Motor overrunning even the message is too slow. <p>The FG signal which is used to detect capstan speed is not supplied to the SERVO CPU. Check the frequency at CAP_FG1,2 (TP80, 82) is correspond with the rotary speed. (about 1.58 kHz, 0/5 V in REC/PB mode). Check the connectors of Capstan, Mech I/F and Mother.</p> <ul style="list-style-type: none"> ● In case of Capstan does not rotate. <p>(1) Check the Servo CPU supplies the acceleration command. Check the SERVO_REF (IC207-2 pin) is about 2.5V. Check the CAP_ERR (TP401) is acceleration command. It is below than SERVO_REF voltage. If the capstan does not rotate, the CAP_ERR voltage should be 0 V. Check Drive ON signal (IC401 - 4 pin) is 5 V (rev) and 0 V (fwd), 2.5 V (OFF). (2) Check the Power Supply voltage. Check the Drive IC power voltage (VCC 5V : IC401 - 27 pin). Check Motor Drive voltage CAP_VM (Q402 - 1 or 8 pin). (3) Check the Drive signal is supplied to Capstan motor. Check the connectors of Capstan, Mech I/F and Mother. If above conditions are correct, motor or drive circuit is incorrect.</p>
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<p>Fig 1 REEL Position Detect</p>		<p>Rotate the REEL motor in EJECT mode and check the following waveform.</p> <p>F1 board P2 - 10a TRH1+ 10b TRH1- 10c TRH2+ 11a TRH2- 11b TRH3+ 11c TRH3- 12c SRH1+ 13a SRH1- 13b SRH2+ 13c SRH2- 14a SRH3+ 14b SRH3-</p>
<p>Fig2 REEL Drive Waveform</p>		<p>Select T or S_REEL_TRQ on the Service menu(Servo Adjust) and rotate the REEL and confirm the following waveform is like Fig. 2.</p> <p>F1 board P2-23b TRM3 23c TRM1 24c TRM2 25b SRM3 25c SRM1 26c SRM2</p>

<p>Fig. 3 Brake Solenoid</p>	 <p>The diagram shows a voltage signal over time. It starts at 0V, rises to a level labeled 'About 10V' for a short duration, then returns to 0V. After a short delay, it rises to a level labeled 'About 4V' and remains there. The 0V level is explicitly labeled at the start and end of the pulses.</p>	<p>Select T or S_REEL_TRQ on the Service menu(Servo Adjust) and check the waveform like Fig. 3 appears at following positions at Brake is released.</p> <ul style="list-style-type: none"> ● T_REEL_TRQ selection F2 board P2 -25C T_BRAKE_N ● S_REEL_TRQ selection F2 board P2 -23C S_BRAKE_N
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SECTION 3

DISASSEMBLY & MAINTENANCE

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1. Maintenance

1-1.Maintenance Part Chart

No	Name	Part Number	Part Using Hours (Unit hours)					
			2,000	4,000	6,000	8,000	10,000	12,000
.	Tape Path Cleaning		△Clean the Tape Path at each 500 hours					
1	Cylinder Unit	V E G 1 4 9 8	●	●	●	●	●	◎
2	Cleaning Arm Unit	V X L 2 9 2 4	●	●	●	●	●	◎
3	Pinch Arm Unit	V X L 2 8 3 5		●■		●■		◎
4	S Reel Motor Unit	V E M 0 6 8 6			●			◎
5	T Reel Motor Unit	V E M 0 6 8 7			●			◎
6	Thrust Screw Unit	V X Q 0 5 5 6			●▲			◎
7	Front Loading Unit	V X A 6 0 7 0						●
8	Mech. Chassis Unit	V X Y 1 4 3 1 Z 1						●
9	Fan Motor	V R F 0 1 9 0	Replace the Fan Motor at each 10,000 hours <u>Operation Time</u>					

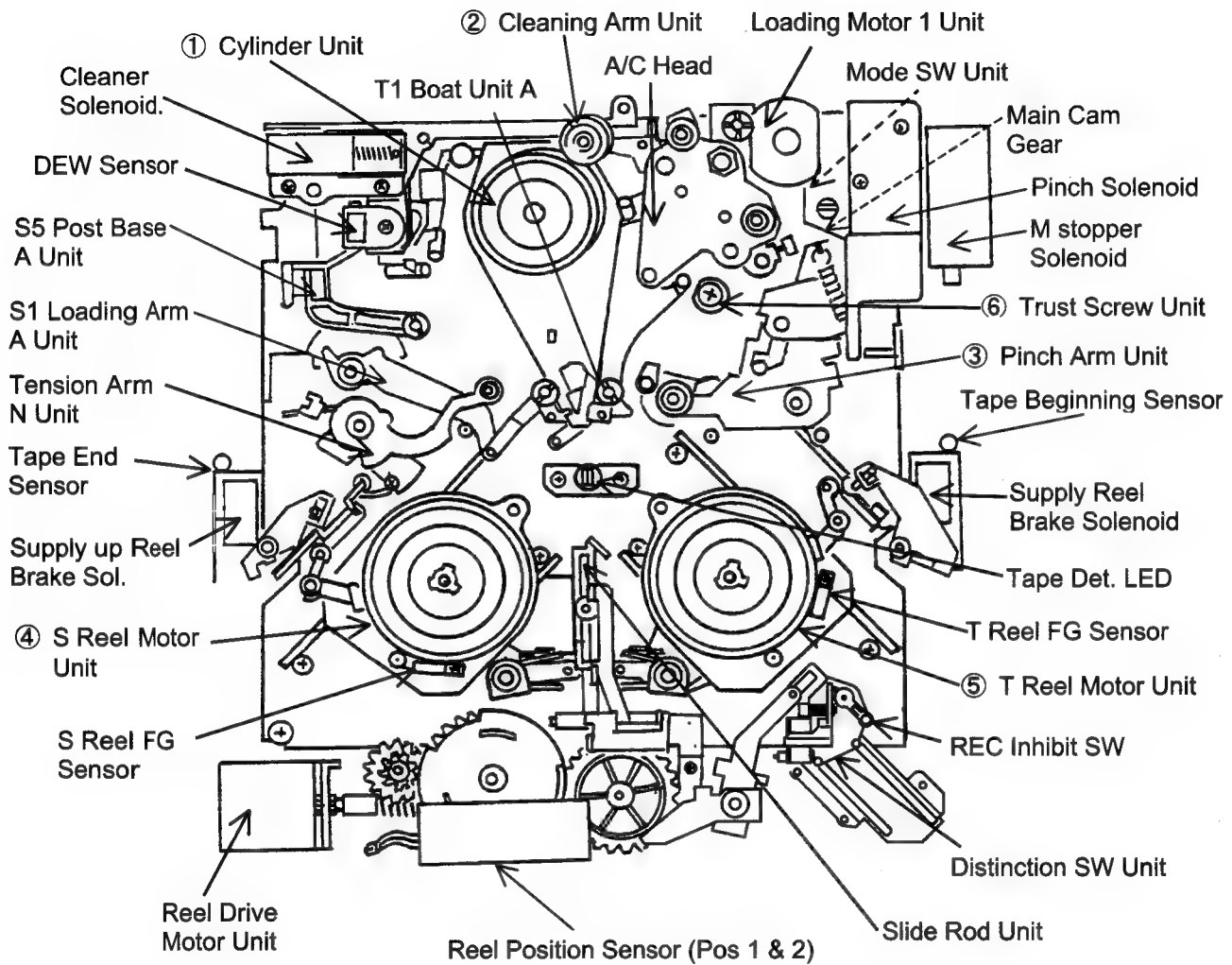
Note: Using hours are based on the head rotation hours.

Using hours are recommendation. It may depended on temperature, humidity or dusty.

Using hours are listed as the reference of maintenance. They do not mean guarantee Hours.

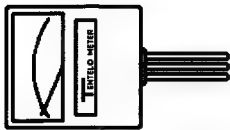
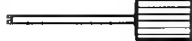
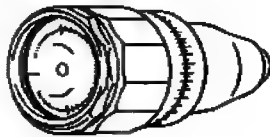



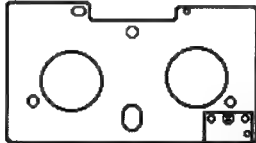





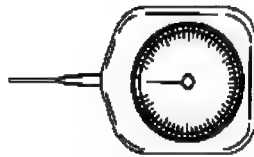






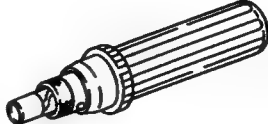
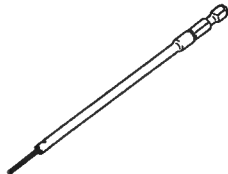
Symbol	Maintenance	Remark
●	Replacement	
◎	Replacement	These parts are included in Mech Chassis Unit
■	Greasing	Wipe the old grease and apply new grease
△	Cleaning	This mark means cleaning is necessary
▲	Lubrication	The lubrication is necessary

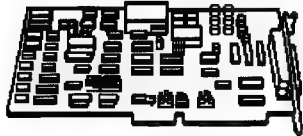
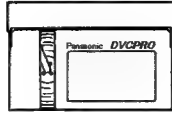
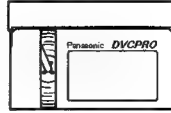
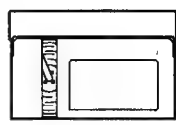
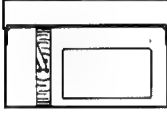
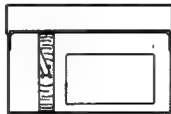
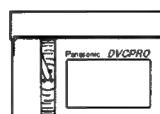


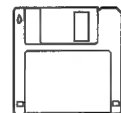
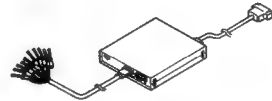
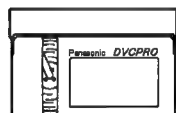
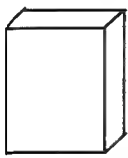

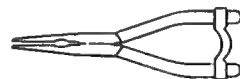



1-2. Sensors Layout



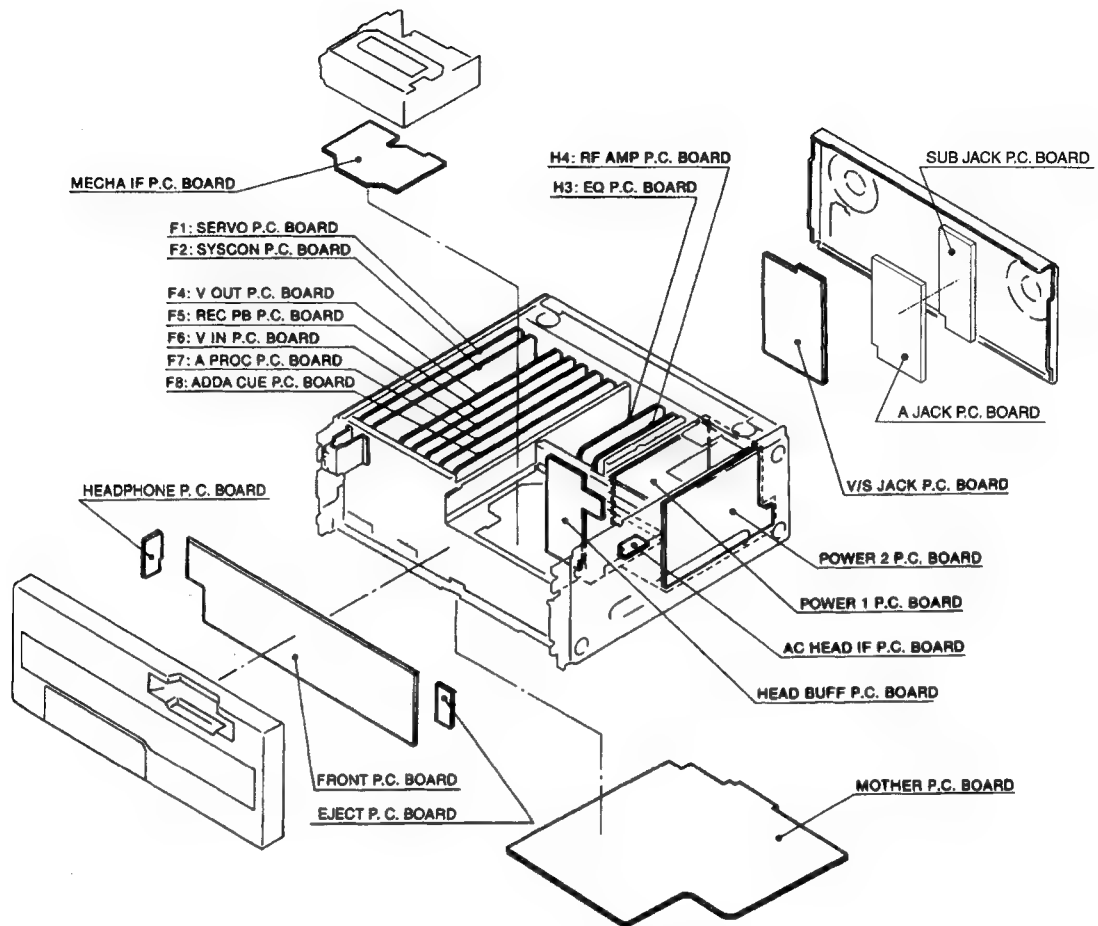
1-3. Servicing Fixtures & Tools

No.	Part No.	Name	AJ-D850	Remark
1	VFK1145	Back Tension Meter (T2-M30-P)	○	
2	VFK1149	Post Driver	○	
3	VFK71	Dial Torque Gauge (150 g)	○	
4	VFK1191	Dial Torque Gauge (45g)	○	
5	VFK1152	Dial Torque Gauge Adapter	○	
6	VFK0357	Eccentric Screwdriver (1.5)	○	
7	VFK1154	Post Height Fixture	○	
8	VFK1153	Mech. Neutral Plate(Post)	○	
9	VFK0906	Oil	○	
10	VFK1155	REV Position Tool (Silver color)	○	
11	VFK1156	PLAY Position Tool (Black color)	○	
12	VFK1208	Neutral Position tool (Black with hole)	○	
13	VFK1150	Nut Driver (5.5mm)	○	
14	VFK1151	Nut Driver (2.5mm)	○	
15	VFK1188	Dial Tension Gauge (30g)	○	
16	VFK0948A	Check Light	○	
17	VFK0749	Froiral Grease (White: for plastic part)	○	
18	M0R265	Morlytone Grease (Black: for metal part)	○	
19	VFK1146	Philips Driver (00-75)	○	
20	VFK1147	Philips Driver (00-100)	○	
21	VFK1148	Hex. Driver (1.5mm)	○	
22	VFK1178	Hex. Driver (0.89mm)	○	
23	VFK1179	Hex. Driver (0.71mm)	○	
24	VFK1190	Hex. Wrench (1.5mm)	○	
25	VFK1209	Torque Driver(0.4-3Kg)	○	
26	VFK1375	Post Axis Driver(1.5mm)	○	or VFK0912
27	VFK1300	A/D Converter Board (DAQ-12 Quatech)	○	Purchase Locally
28	VFM3580KM	Alignment Tape (No.1)	○	for NTSC
29	VFM3581KM	Alignment Tape (No.2)	○	for NTSC
30	VFM3582KM	Alignment Tape (No.3)	○	
31	VFM3680KM	Alignment Tape (No.1)	○	for PAL
32	VFM3681KM	Alignment Tape (No.2)	○	for PAL
33	VFM3682KM	Alignment Tape (No.3)	○	for PAL
34	VFM3000EDS	Alignment Tape (DV LISTA)	○	
35	VFM3010EDS	Alignment Tape (DV Color Bar)	○	for NTSC
36	VFM3010EDS	Alignment Tape (DV Colour Bar)	○	for PAL
37	AJ-CL12MP	Cleaning Tape	○	
38	VFK1192	Extension Board (F)	○	
39	VFK1193	Extension Board (H)	○	
40	VFK1481	LISTA Software	○	
41	VFK1186	LISTA Cable	○	
42	VFK1160C	RF Adjustment Software	○	
43	VFK1163	RF Adjustment Tape	○	
44	VFK1423	Tape Det. Sensor Cassette	○	
45	VZZ0095	Cleaning Cross	○	
46	VFK0369	Tweezers	○	
47	VFK0371	Radio Prier	○	
48	VFK0372	Cutter Prier	○	
49	VFK0338	Trimmer Adjustment Driver	○	
50	VFK0337	Philips Driver	○	

<p>1 VFK1145 Back Tension Meter</p>  <p>Model:T2-M30-P</p>	<p>2 VFK1149 Post Driver</p> 	<p>3 VFK71 (150g) 4 VFK1191(45g) Dial Torque Gauge</p> 	<p>5 VFK1152 Dial Torque Gauge Adapter</p> 
<p>6 VFK0357(φ 1.5) Eccentric Screwdriver</p> 	<p>7 VFK1154 Post Height Fixture</p> 	<p>8 VFK1153 Mech Neutral Plate(Post)</p> 	<p>9 VFK0906 OIL (for Thrust Adjustment screw)</p>
<p>10 VFK1155 (REV, Silver) 11 VFK1156 (PLAY, Black) 12 VFK1208(Neutral,Black With hole)</p>  <p>(Gold) (Black)</p>	<p>13 VFK1150 Nut Driver(5.5mm)</p>  <p>5.5mm</p> 	<p>14 VFK1151 Nut Driver(2.5mm)</p>  <p>2.5mm</p> 	<p>15 VFK1188(30g) Dial Tension Gauge</p> 
<p>16 VFK0948A(or purchase locally) Check Light</p> 	<p>17 VFK0749 Froiral Grease(White) (for plastic part)</p> 	<p>18 MOR265 Morlytone Grease(Black) (for metal part)</p> 	<p>19 VFK1146 (00 x 75) 20 VFK1147 (00x 100) Philips Driver</p> 
<p>21 VFK1148(1.5mm) 22 VFK1178(0.89mm) 23 VFK1179(0.71mm) Hex. Driver</p> 	<p>24 VFK1190 (1.5mm) Hex. Wrench</p> 	<p>25 VFK1209 Torque Driver(0.4-3Kg)</p> 	<p>26 VFK1375 or VFK0912 Post Axis Driver(1.5mm)</p> 

<p>27 VFK1300 A/D Converter Board (For Quatech. DAQ-12 Purchase Locally)</p> 	<p>28 VFM3580KM 29 VFM3581KM 30 VFM3582KM DVC PRO Alignment Tape (for NTSC)</p> 	<p>31 VFM3680KM 32 VFM3681KM 33 VFM3682KM DVC PRO Alignment Tape (for PAL)</p> 	<p>34 VFM3000EDS DV Alignment Tape (LISTA)</p> 
<p>35 VFM3010EDS DV Alignment Tape (Color Bar) (for NTSC)</p> 	<p>36 VFM3110EDS DV Alignment Tape (Colour Bar) (for PAL)</p> 	<p>37 AJ-CL12MP Cleaning Tape</p> 	<p>38 VFK1192 --- (F) 39 VFK1193 --- (H) Extension Board</p>  <p>(F) (H) Common for AJ-D750</p>
<p>40 VFK1481 LISTA Software 41 VFK1186 LISTA Cable</p> 	<p>42 VFK1160C RF Adjustment Soft</p> 	<p>43 VFK1163 RF Adjustment Tool</p> 	<p>44 VFK1423 Tape Sensor Cassette (M Cassette)</p> 
<p>45 VZZ0095 Cleaning Cross</p> 	<p>46 VFK0369 Tweezers</p> 	<p>47 VFK0371 Radio Prier</p> 	<p>48 VFK0372 Cuntter Prier</p> 
<p>49 VFK0338 Trimmer Adjustment Driver</p> 	<p>50 VFK0377 Philips Driver</p> 		

1-4. Boards Location



1-5. Alignment Tapes

DVCPRO Alignment Tape

VFM3580KM(NTSC)

Time	Video		PCM		CUE	
(min)	Signal	Purpose	Signal	Purpose	Signal	Purpose
0:00	Color Bar SMPTE(75%)	Composite Video Level Confirmation	1kHz - 20dB	Audio Level Confirmation	1kHz 0VU	CUE Level Confirmation
7:00	Color Bar Full Field(75%)	Component Video Level Confirmation				
14:00	H Sweep	Frequency Response			6kHz 0VU	A/C Head Azimuth
18:00	Bowtie(500k)	Y/C Timing			-10dB, 1kHz 50Hz~15kHz	Frequency Response
22:00	Pulse&Bar	Y/C Timing				
26:00	Area Markers					
30:00						

VFM3581KM(NTSC)

Time(min)	Signal
0:00~20:00	ITI Pattern

VFM3582KM(NTSC)

Time(min)	Signal
0:00~10:00	X Value

VFM3680KM (PAL)

Time	Video		PCM		CUE	
(min)	Signal	Purpose	Signal	Purpose	Signal	Purpose
0:00	Color Bar 100%	Video Level Confirmation	1kHz -18dBu	Audio Level Confirmation	1kHz Reference level	CUE Level Confirmation
10:00	H Sweep	Frequency Response			6kHz Reference level	A/C Head Azimuth
14:00	Area Markers					
18:00	Bowtie(500k)	Y/C Timing			1kHz 300Hz~6kHz	Frequency Response
22:00	Pulse & Bar	Y/C Timing				
26:00	Multi Pulse	Y/C Timing				
30:00						

VFM3681KM (PAL)

Time (min)	Signal
0:00 ~ 20:00	ITI Pattern

VFM3682KM (PAL)

Time (min)	Signal
0:00 ~ 10:00	X Value

1-6. Recommended Test And Service Equipment

NTSC

Part No.	Name	Remark
TSG130A(OP.04)	Analog Component Signal Generator	TEKTRONIX
	Oscilloscope	
1750,1760(OP.SC) or 1780R	WFM Monitor	TEKTRONIX
	Digital Volt Meter	
	Frequency Counter	
	VTVM	Frequency Band Width 4Hz-500KHz
	Audio Analyzer	

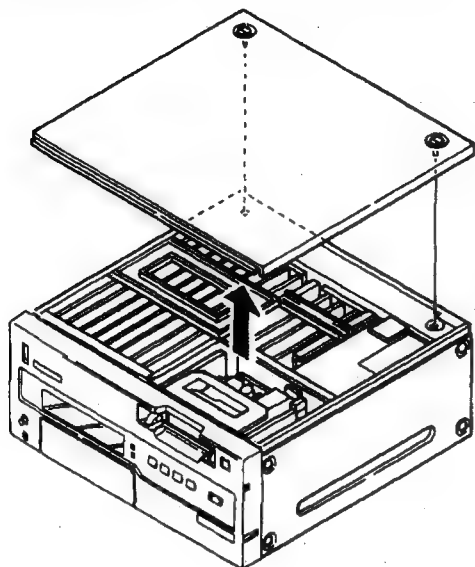
PAL

Part No.	Name	Remark
TSG131A(OP.04)	Analog Component Signal Generator	TEKTRONIX
	Oscilloscope	
1751,1761(OP.SC) or 1781R	WFM Monitor	TEKTRONIX
	Digital Volt Meter	
	Frequency Counter	
	VTVM	Frequency Band Width 4Hz-500KHz
	Audio Analyzer	

2. Disassembly Method

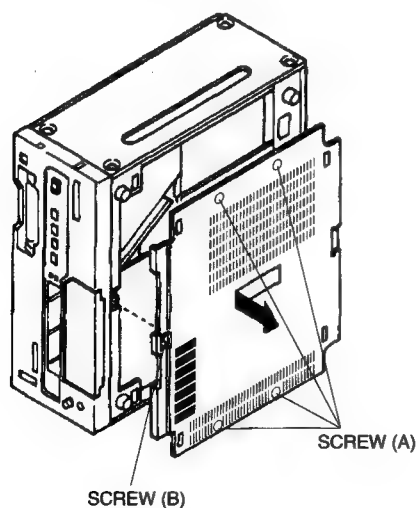
2-1. Removal of Top Panel

1. Loosen the two screws on the top panel.



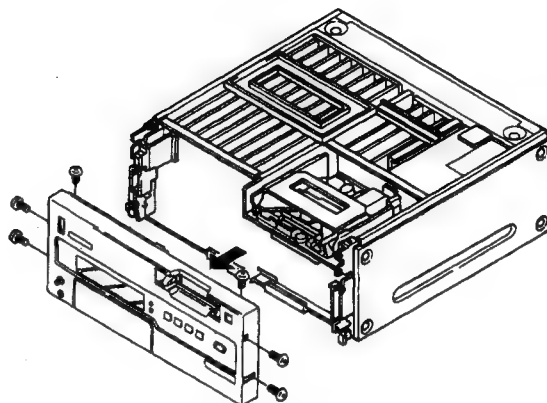
2-2. Removal of Bottom Panel

1. Unscrew the 4 screws (A) and loosen the screw (B).
2. Slide the bottom panel to front direction and remove the Bottom Panel.



2-3. Removal of Front Panel

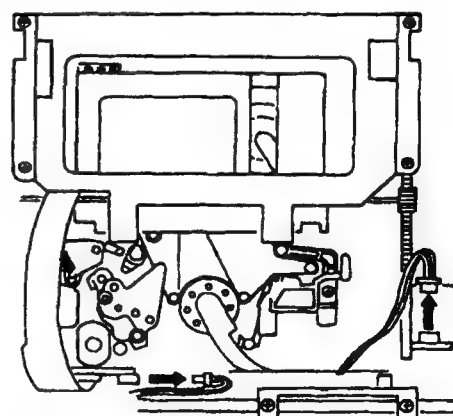
1. Remove the 4 screws at left and right.
2. Remove the 2 screws with Front Panel on the VTR top side.
3. Then draw it and remove the connector and remove the Front Panel.



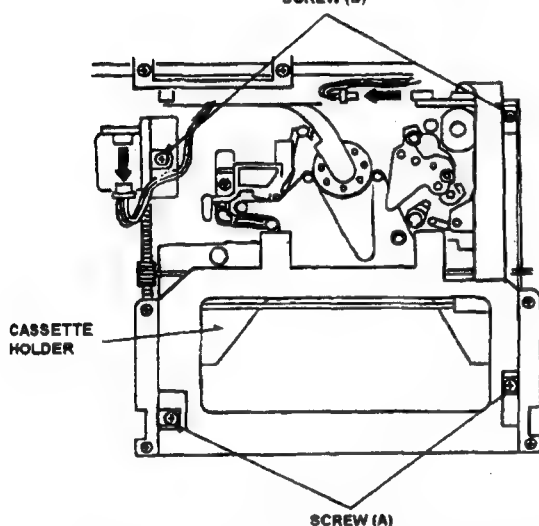
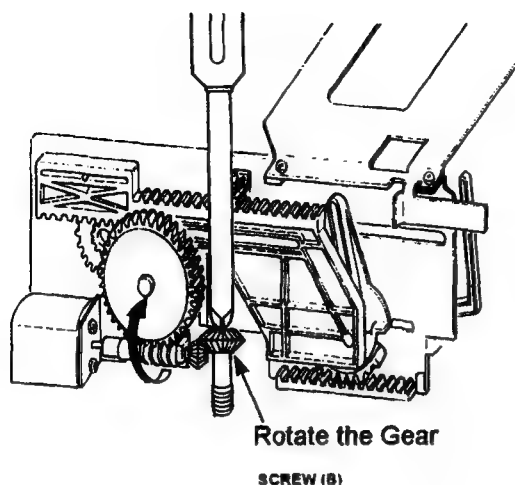
Note: After installation of Front Panel, confirm that the Blinder Panel is moved up and down smoothly by hand. If not, the Blinder Panel is caught by Blinder Panel Opener.

2-4. Removal of Front Loading Unit

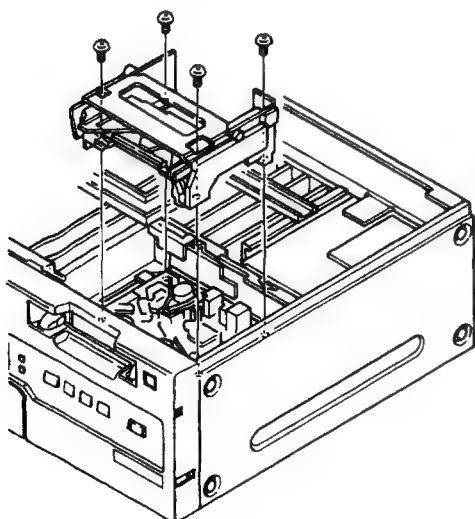
1. Remove the 4 screws at left and right part and the mechanism interconnection board.



2. Rotate the red plastic screw in front of the worm gear of the cassette down motor counterclockwise by a Philips-head screw-driver pushing the screw to move the Cassette Holder unit the 2 screws (A) can be removal position.

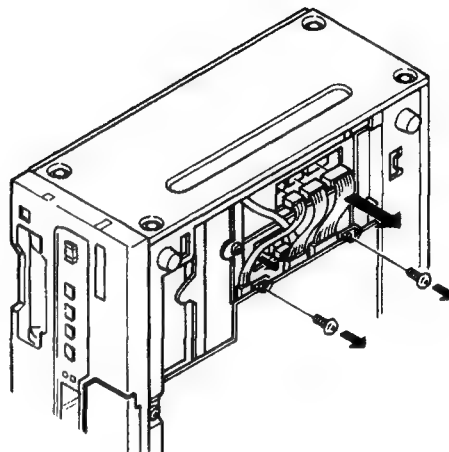


3. Unscrew the 4 screws (A) and (B), then remove the Front Loading Unit.

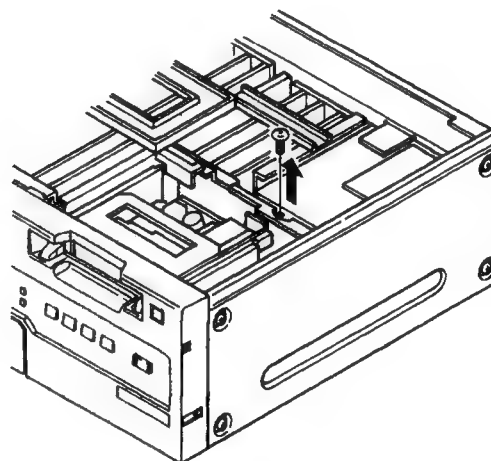


2-5. Removal of Power Supply Unit

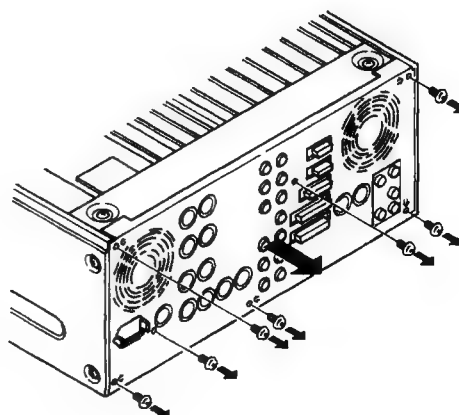
1. Remove 4 connectors with the Power Supply unit on the VTR bottom side.
2. Remove 2 screws with the Power Supply unit on the VTR bottom side.



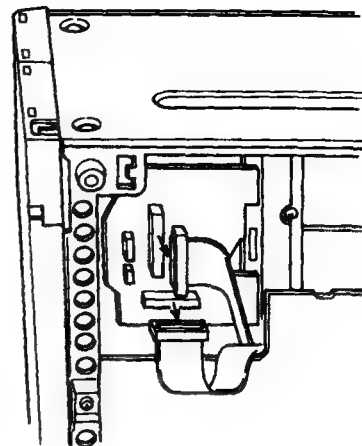
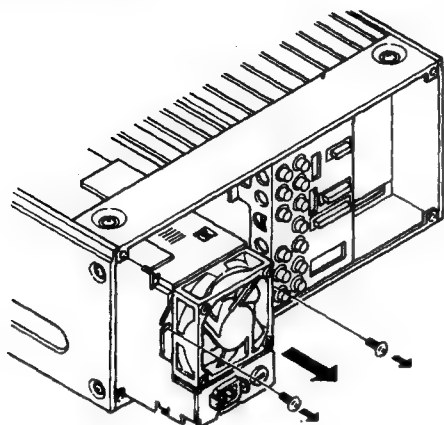
3. Remove one screw with the Power Supply unit on the VTR top side



4. Remove the Rear Jack by removing 7 screws.

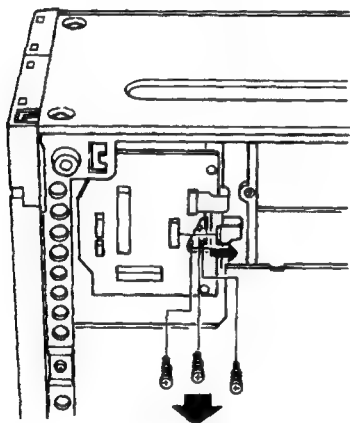


5. Remove 2 screws with the Power Supply unit on the VTR rear side.



2-6. Removal of Cylinder Unit

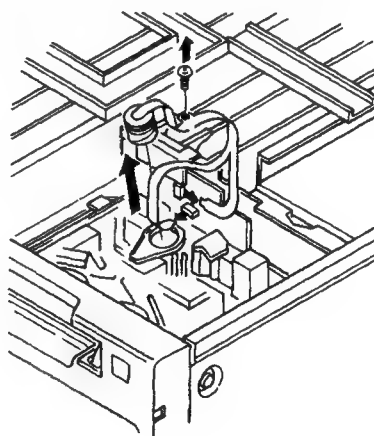
1. Disconnect the connector P33 on the Mech. I/F Board. And remove the 3 screws which have spring from the cylinder unit.



2. Remove the one screw which is fixed with the flexible cable. It attached Cylinder Unit.
3. Disconnect the connector P5003 and P5002 which are connected to Head Buffer board, then remove the cylinder unit without touching any mechanism parts.

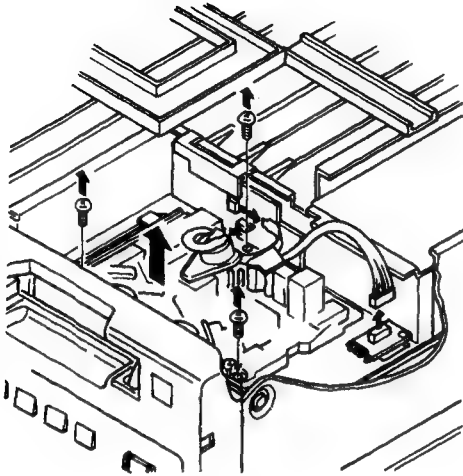
2-7. Removal of Mechanism Unit

1. Remove the Front Loading unit.
2. Remove the Bottom Panel.
3. Disconnect the connector P1 and P2 on the Mech. I/F Board.
4. Disconnect the connector P1 on A/C Head I/F Board for remove the A/C Head cable.

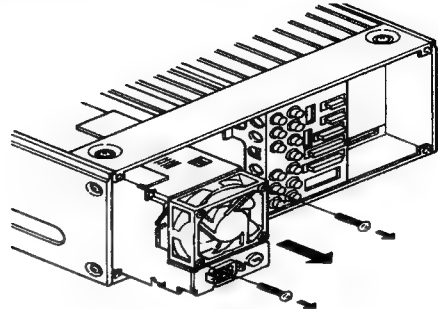


Assemble procedures reverse of the disassembly method.

5. Disconnect the connector P5003 and P5002 on the Head Buffer board.
6. Unscrew the 3 screws and remove the mechanism unit.



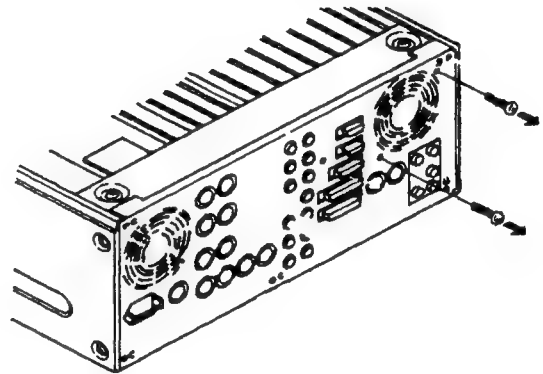
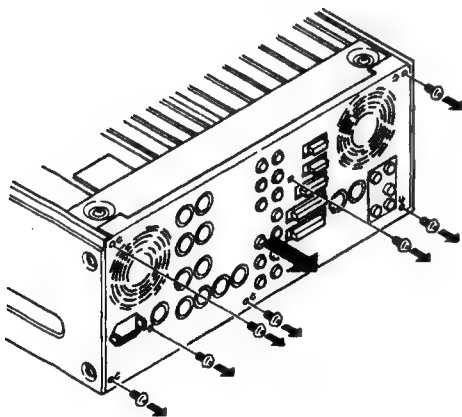
2. Unscrew the screws and disconnect the connector P14 on the Power 2 P.C.B., then remove the Fan Motor Unit.



3. Unscrew the screws and disconnect the connector P032 on the Mother P.C.B., then remove the Fan Motor Unit.

2-8. Removal of Fun Motor Unit

1. Remove the Rear Jack by removing 7 screws.



3. Manual Tape Eject

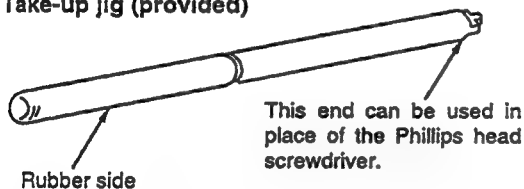
When a tape can not be ejected, because of Power failure or mechanical tape damage, remove the tape manually.

1. Turns power off and remove the top Case Unit.
2. Rotate the red plastic screw by a Phillips - head screwdriver counterclockwise pushing the screw. It needs to rotate about 30 times rotation until starting to move.
3. Since tape slack will develop when the post is unloaded, wind up the supply reel to take up the slack. How to take up the slack (see ③)

- a. Insert the rubber side of the take-up jig into the cassette tape withdrawal opening on the VTR's mechanism side.
- b. Turn the flange part of the supply reel in the direction of take-up to take up the tape slack. (Take care not to damage the tape in the process.)

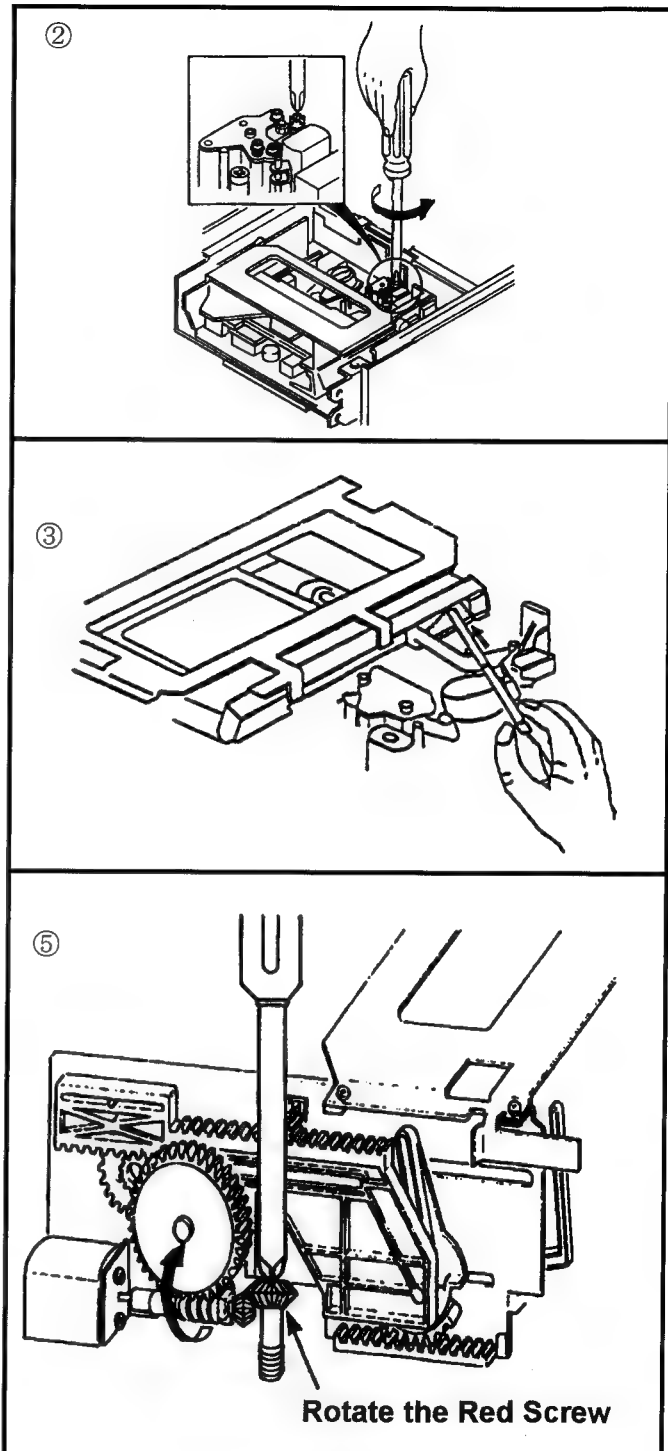
4. Repeat item 2 and 3 until the tape is wound

Take-up jig (provided)



Completely inside of the cassette.

5. When the tape is completely inside of the cassette, rotate the red screw in front of the worm gear of the cassette down motor clockwise by a Phillips-head screwdriver pushing the screw and remove the cassette cover does not bite the tape when the cover is closed.



4. Cleaning Procedures

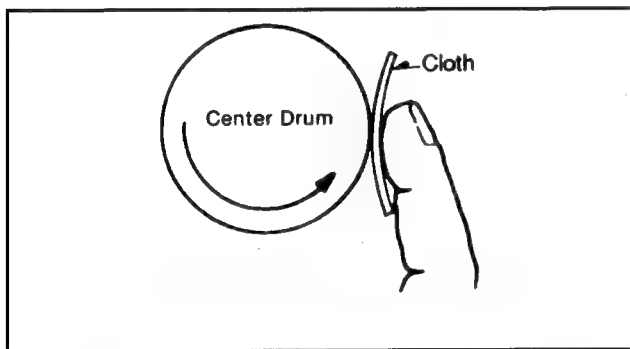
Note: Turns power off during cleaning.

Make sure the power is OFF before cleaning.

Use ethanol (more than 99% purity) as cleaning liquid.

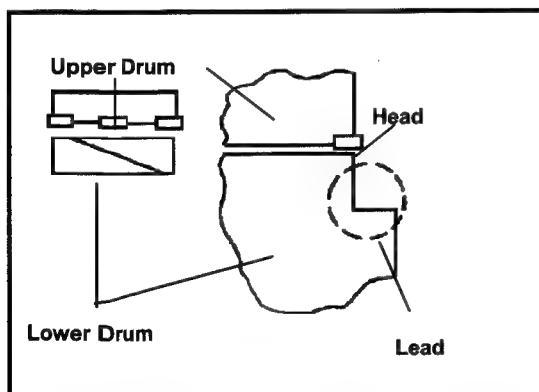
4-1 Cleaning of Head Chips: (Daily)

Clean heads by applying even pressure and rotating cylinder a few times. Never wipe in up and down motion. Never touch a cylinder by naked hand. First wipe with a cloth soaked by cleaning liquid. Then wipe with dry cloth.



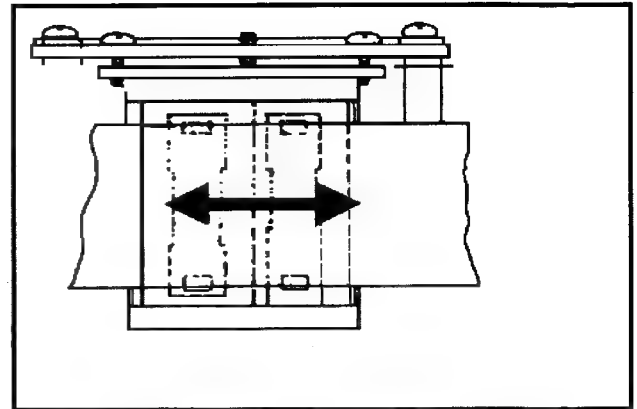
4-2. Cleaning of Drum Lead: (Weekly)

Be careful not to touch a head chip. Clean the drum lead with a pick.



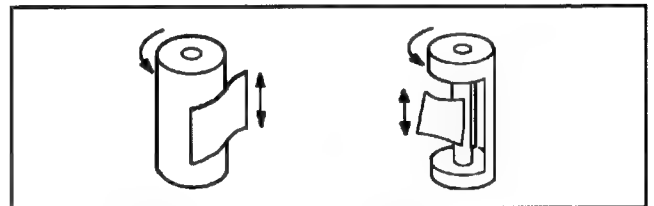
4-3. Cleaning of A/C Head: (Weekly)

Wipe the A/C head with a cloth soaked by cleaning liquid. Wipe again with a dry cloth.



4-4. Cleaning of Pinch Roller and Capstan: (Weekly)

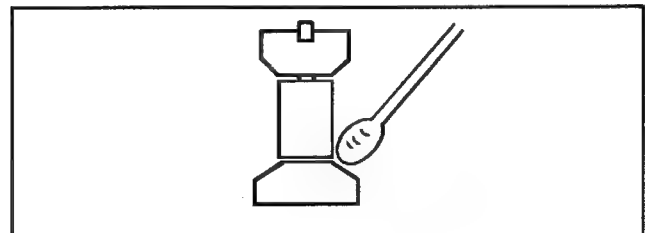
Wipe the Pinch Roller and Capstan with a cloth soaked by cleaning liquid.



4-5. Cleaning of Post : (Weekly)

Wind a cloth on a pick. Wipe each post dry with that pick. Wipe again with a dry cloth. For metal posts wipe with cleaning liquid. Then wipe dry again.

Note:



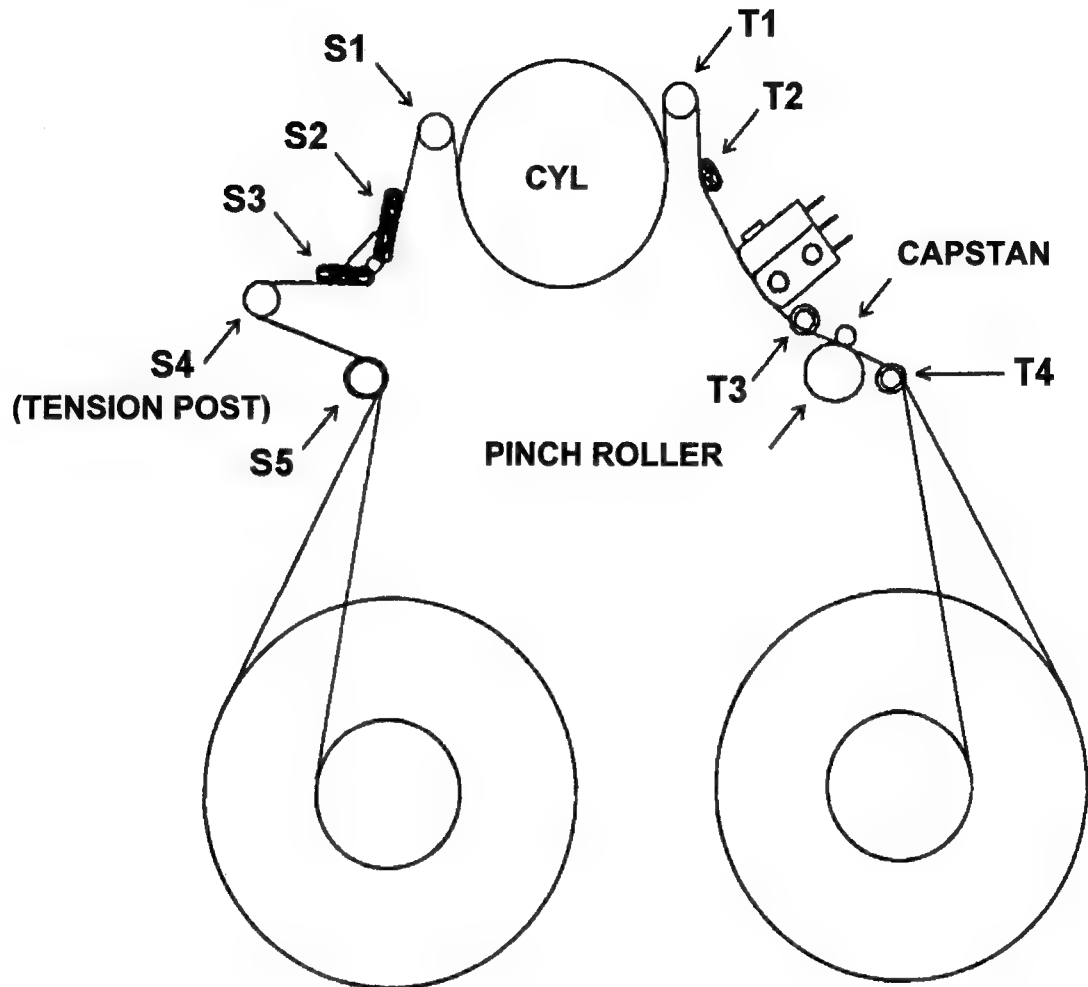
Use the clean cloth for cleaning purpose. Do not use any dirty cloth.

The Cleaning Cloth can be ordered as spare part. The part number indicated as below.

CLEANING CLOTH : VZZ0095

5. Mechanical Adjustment

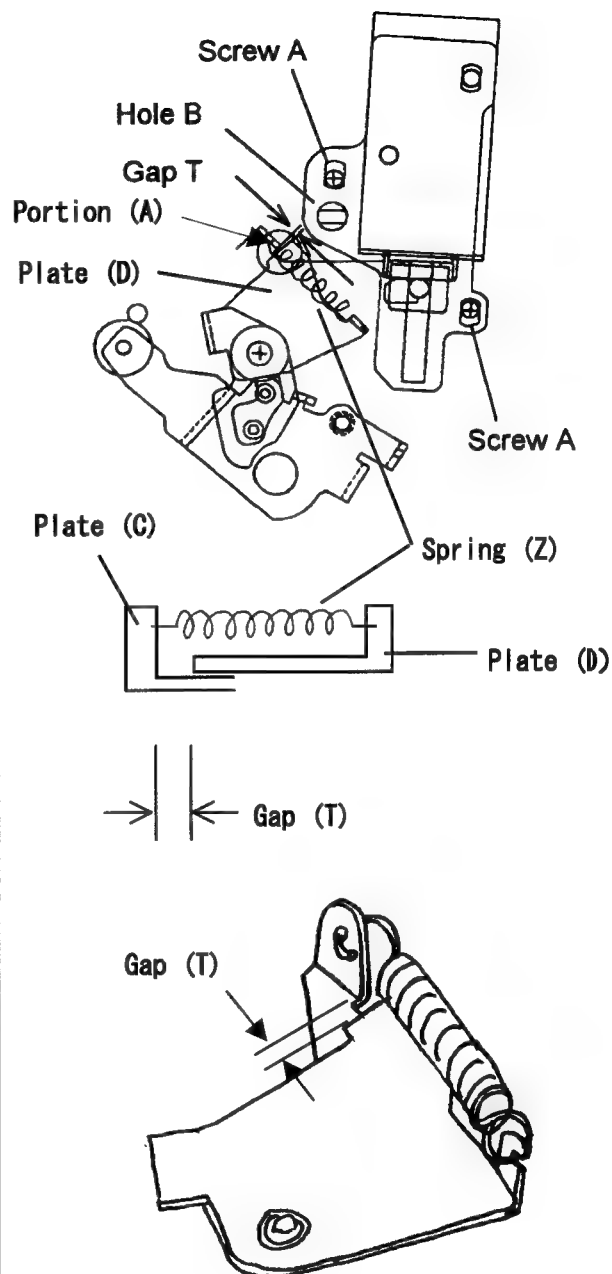
5-1. Name of tape transportation



5-2. Pinch Solenoid Position Adjustment

SPEC.	T = 0.3mm
TEST POINT	Gap T
ADJUSTME	Screw(A), Hole(B)
MODE	EJECT (Power OFF)
TOOL	VFK0357(Eccentric Driver)

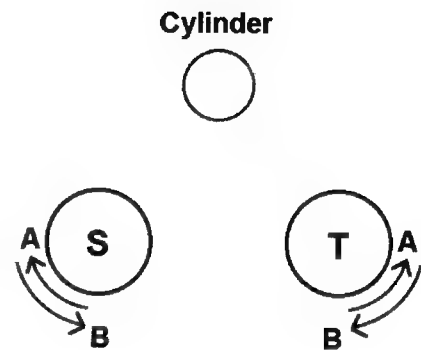
1. Confirm the power of condition at VTR.
2. Push the pinch roller by hand to be close to capstan.
3. Push the pinch solenoid by hand so that the pinch roller contacts capstan.
4. Loosen the two screws (A) and adjust the hole (B) by VFK0357 so that gap (T) is within specification.
5. The position for confirm Gap, which is located spring scratch to Plate (C) side.



5-3. Main Brake Torque Confirmation

SPEC	Direction A : $40 \pm 20 \text{g} \cdot \text{cm}$ Direction B : $20 \pm 15 \text{g} \cdot \text{cm}$
TEST POINT	S reel, T Reel
MODE	EJECT (POWER OFF)
TOOL	VFK71(150g), VFK1191(45g), VFK1152

1. Remove the Cassette Up Unit.
2. Install the adapter(VFK1152) to the torque gauge (VFK71).
3. Put the torque gauge on S Reel and Turn the torque gauge to direction A until S Reel slips against brake.
4. Confirm the torque is within specification.
5. Put the torque gauge on T Reel and turn the torque gauge to direction A until T Reel slips against brake.
6. Confirm the torque is within specification
7. Install the adapter(VFK1152) to the torque gauge (VFK1191).
8. Put the torque gauge on S Reel and turn the torque gauge to direction B until S Reel slips against brake.
9. Confirm the torque is within specification.
10. Put the torque gauge on T Reel and turn the torque gauge to direction B until T Reel slips against brake.
11. Confirm the torque is within specification.



5-4. Post Height Pre-adjustment

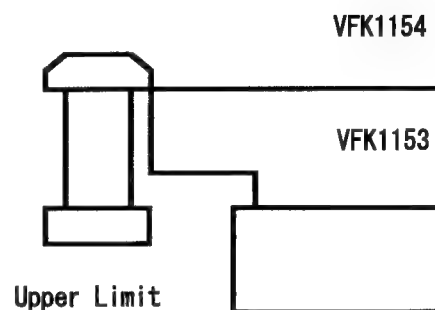
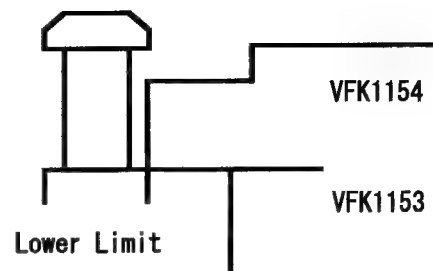
MODE EJECT (POWER OFF)

TOOL VFK1153, VFK1154 (Flange Tool)

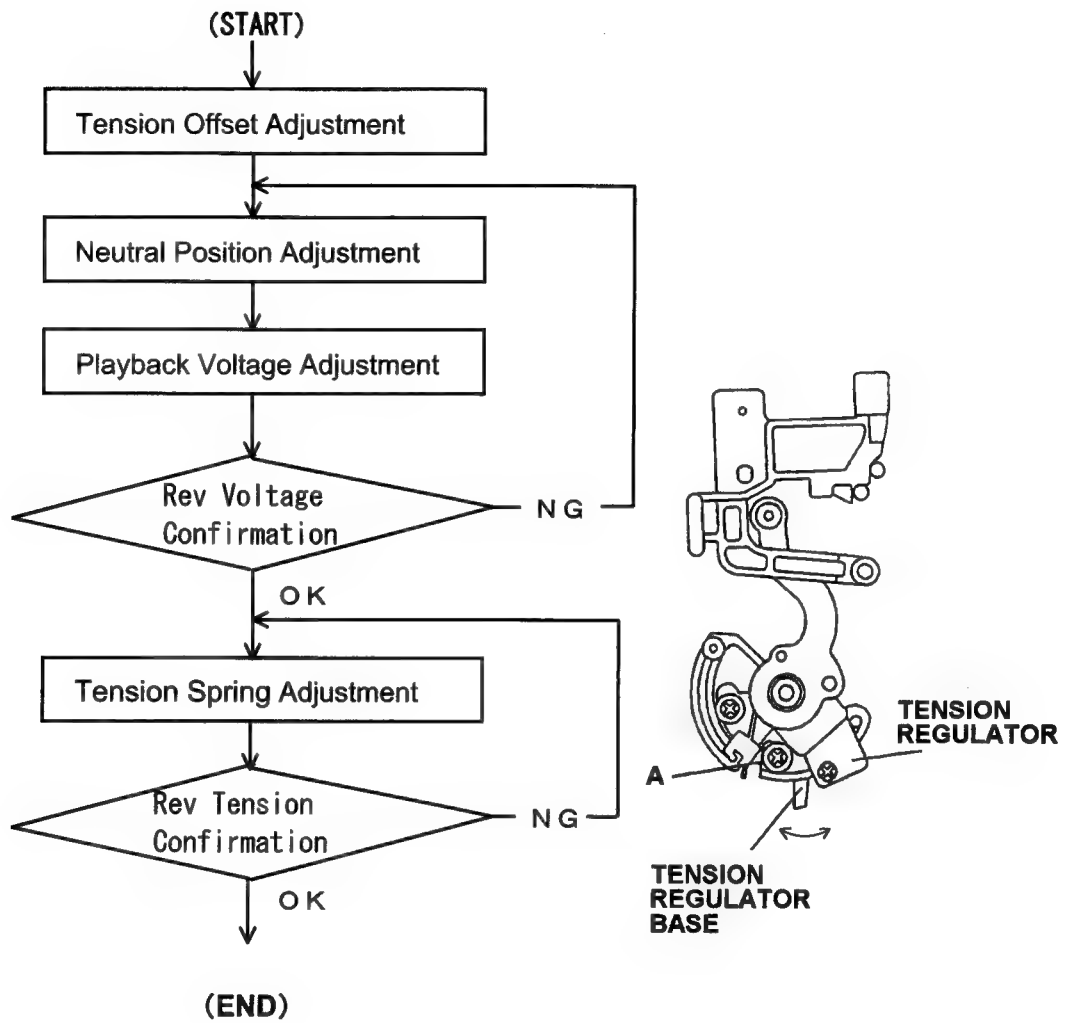
1. Confirm that the Reel Table is located at M Cassette position. If it is not located at M cassette position, turn power on and insert M cassette and eject it.
2. Turn power off and remove the Front Loading Unit. Install the Mech. Neutral Plate (VFK1153).
3. Place the flange tool(VFK1154) on Mech. Neutral Plate and adjust each post height as shown in figure.
4. Adjust the each post to Lower limit by VFK1154 as shown in figure.
5. VFK1149 use for Post height adjustment of S4 and S5 post. VFK1151 use for Post height adjustment of T3 and T4 post.

Post	Limit	Post Driver
S5 Post	Lower*	VFK1149
S4 Post	Lower*	VFK1149
T3 Post	Lower	VFK1151(2.5mm Nut Driver)
T4 Post	Lower	VFK1151(2.5mm Nut Driver)

Note: Lower* : Turn S4 and S5 posts 1 round more counterclockwise from lower limit position.



5-5. Tension Adjustment Flowchart

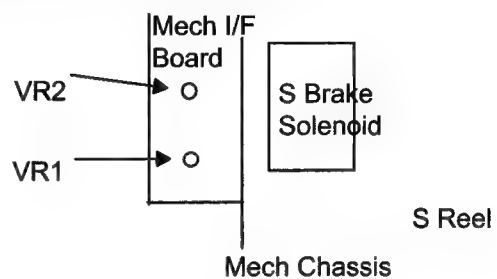


5-6. Tension Offset Adjustment

BOARD	SERVO
SPEC	$2.5 \pm 0.05V$
TEST POINT	TP201(SERVO:F1)
ADJUSTMENT	VR1(MECH I/F)
MODE	EJECT
TOOL	Digital Volt Meter

1. Adjust the VR1 so that the DC voltage at TP201 is within specification.

Left side of S Brake Solenoid



5-7. Tension Arm Neutral Position Adjustment

BOARD	SERVO
SPEC	$2.5 \pm 0.1V$
TEST POINT	TP201(SERVO:F1)
ADJUSTMENT	Base position of Tension Regulator Board
MODE	STOP
TOOL	Digital Volt Meter VFK1208 (Black with hole)

1. Unscrew the 2 screws and remove the Carriage Support Panel on the Front Loading Unit.
2. Disconnect the connector P3 on the Carriage Board of the Front Loading Unit..
3. Unscrew the 6 screws and remove the Top Plate on the Front Loading Unit.
4. Install the VFK1208(black with hole) as shown in figure
5. Connect the Digital Volt Meter to Test point.
6. Place the unit into the no tape loading mode(Refer to No tape loading mode procedure as mentioned as below.
7. Loosen the screw (A) and move the lever (D) with tweezers for adjust the sensor position so that the DC voltage at TP201 is within specification.

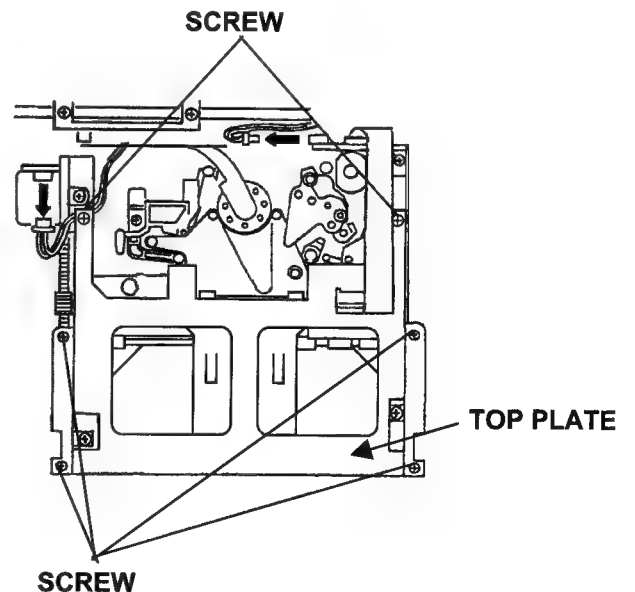
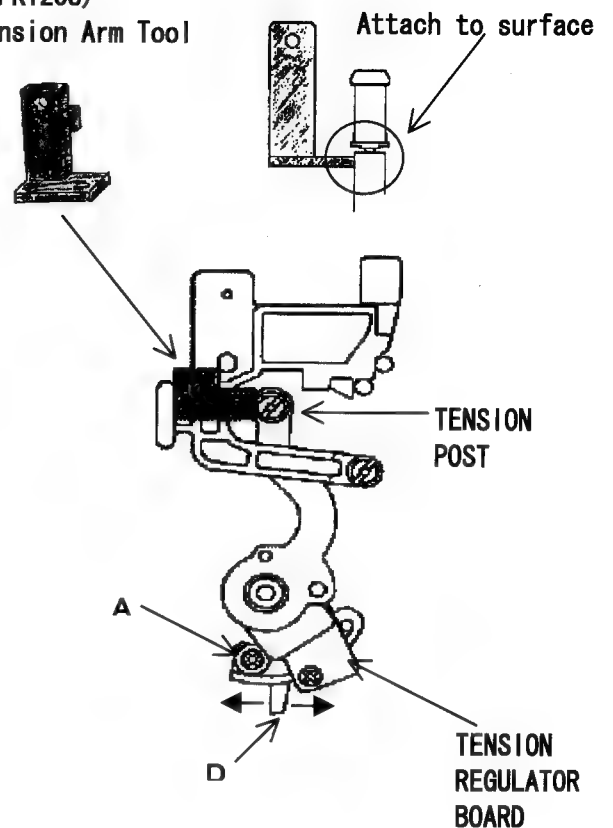
[No tape loading procedures]

Open the SERVO ADJUST menu on the Service Menu. Select the "A02:T REEL TRQ" by cursor key (▼,▲)and press STOP button on the Front Panel, then loading is started. During adjustment, hold the STOP button.

CAUTION: 1. Do not use magnetized tweezers and Screw driver.

2. Do not touch the magnetize Screw driver to S-Reel FG magnet portion, when the lever (D) portion is adjusting.

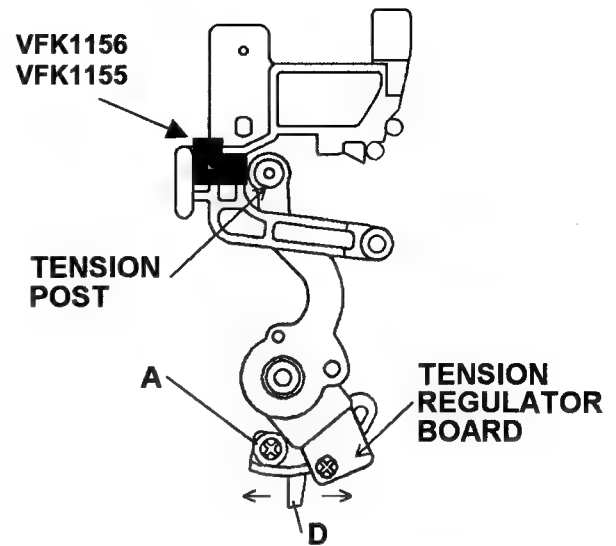
(VFK1208)
Tension Arm Tool



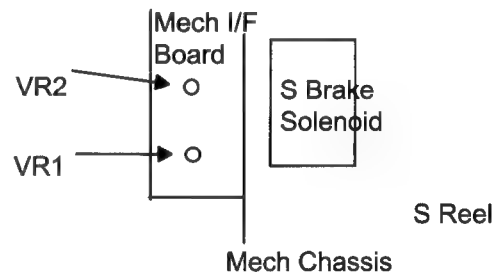
5-8. Tension Arm PLAY and REV voltage adjustment

BOARD	SERVO
SPEC	(PLAY) $3.8 \pm 0.05V$ (REV) $1.2 \pm 0.3V$
TEST POINT	TP201(SERVO:F1)
ADJUSTMENT	VR2(Mech I/F)
MODE	STOP
TOOL	Digital Volt Meter VFK1156(Black: for PLAY position) VFK1155(Silver: for REV position)

1. Install the VFK1156(black) as shown in figure.
2. Connect the Digital Volt Meter to Test point.
3. Place the unit into no tape loading mode.
4. Adjust the VR2 so that the DC voltage at TP201 is within specification (PLAY).
5. Install the VFK1155 as shown in figure and confirm that the DC voltage at TP201 is within specification (REV).
6. If it out of spec, perform the Neutral Position adjustment again.



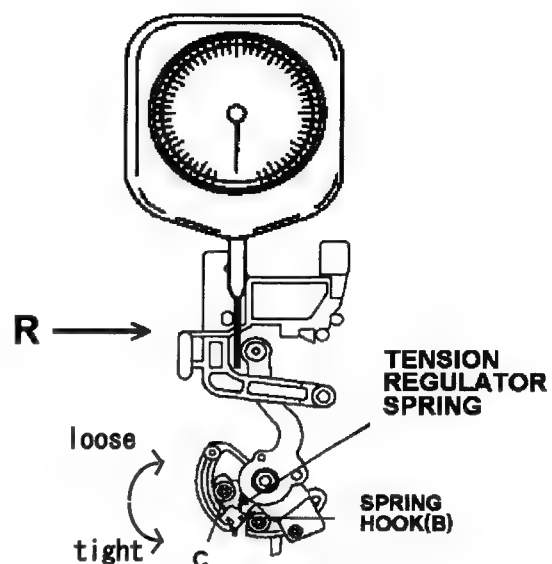
Left side of S Brake Solenoid



5-9. Tension Regulator Spring Adjustment

BOARD	SERVO
SPEC	$11 \pm 1\text{gf}$
TEST POINT	TP201(SERVO:F1)
ADJUSTMENT	Tension Regulator Spring hook (B)
MODE	STOP
TOOL	Digital Volt Meter VFK1188(30g Dial Tension Gauge)

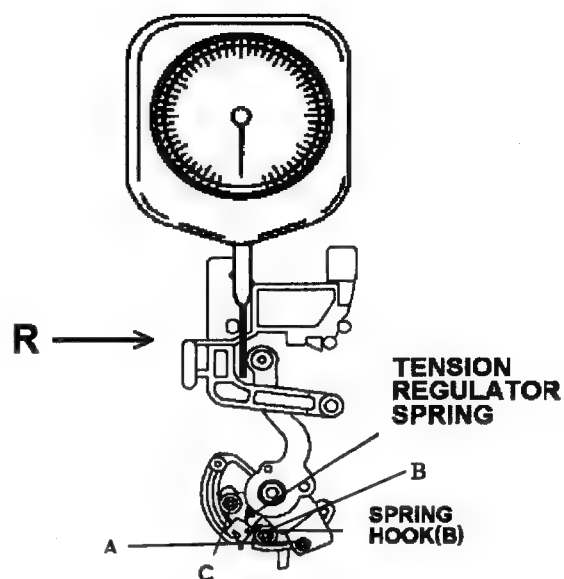
1. Connect the Digital Volt Meter to Test point.
2. Place the VTR into no tape loading mode.
3. Insert the tension gauge to push the tension post to the direction R until the voltage at the TP201 is 3.8V (PLAY position)
4. Loosen the screw (C) and adjust the position of hook (B) so that the indication of gauge is within specification.



5-10. REV Tension Confirmation

BOARD	SERVO
SPEC.	$18 \pm 2\text{gf}$
TEST POINT	TP201(SERVO:F1)
MODE	STOP
M.EQ	Digital Volt Meter VFK1188(30g Dial Tension Gauge)

1. Connect the Digital Volt Meter to Test point.
2. Place the VTR into no tape loading mode.
3. Insert the tension gauge to push the tension post to the direction R until the voltage at the TP201 is 1.2V (REV position)
4. Confirm that the indication of gauge is within specification. If not, make the Tension Spring Adjustment again.
5. After finish this adjustment , grew the screw A,B and C . The grew quantity at B is half of A and C .

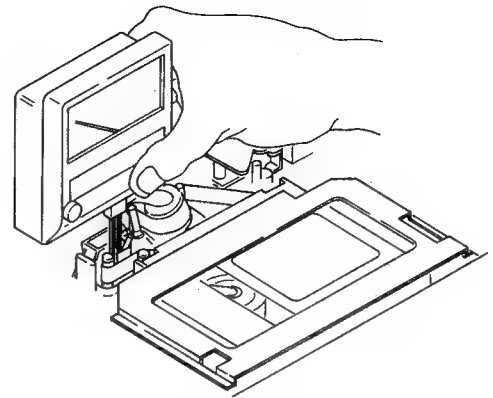


5-11. Tension Confirmation

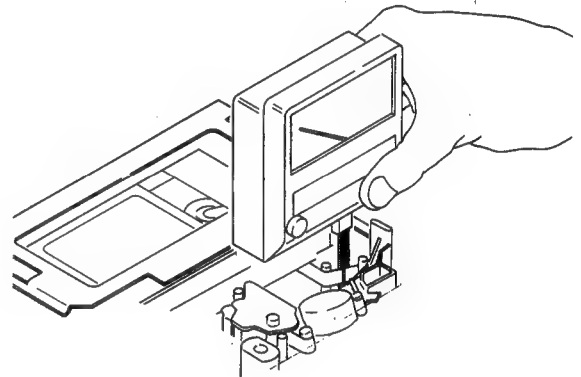
SPEC	(PLAY) $6.0 \pm 1\text{gf}$ (REV) $9.0 \pm 2\text{gf}$
MODE	PLAY, REV $\times 1$
TAPE	63 min M size Blank Tape
TOOL	VFK1145(Tension Meter)

1. Play back beginning portion of the tape.
2. Insert the tension meter between S3 post and S4 post.(Refer to figure).
3. Confirm the tension is within specification.
4. Place the unit in REV mode.
5. Insert the tension meter between S4 post and S5 post.(Refer to figure)
6. Confirm the tension is within specification.

NOTE: Be careful not to give some tape damage.

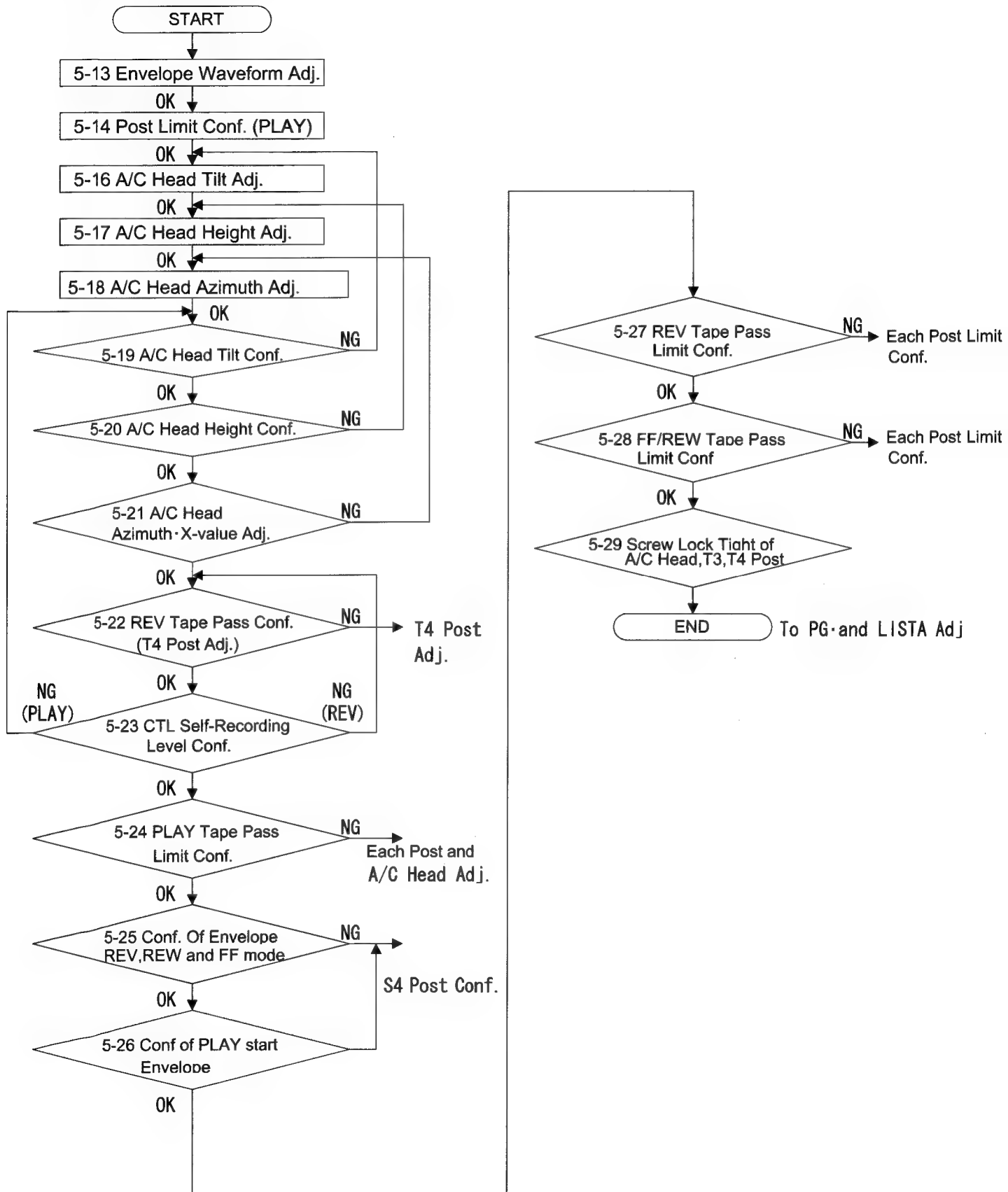


Play Tension



Rev Tension

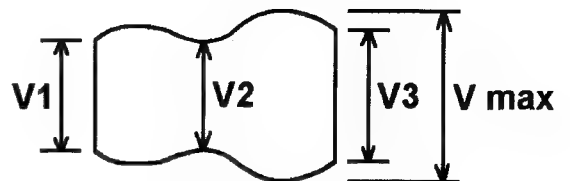
5-12. Tape Pass Adjustment Procedure



5-13. Envelope Waveform Adjustment

SPEC	$V1/V_{max}, V2/V_{max}, V3/V_{max} \geq 0.8$
TEST POINT	TP16:R/P ENV (RF AMP Board:H4) TP1 :TRIG/HSW (RF AMP Board:H4)
ADJUSTMENT	S1, T1 Post Height
MODE	PLAY(ATF)
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Oscilloscope
TOOL	VFK1149(Post Driver)

1. Playback the alignment tape.
2. Adjust S1 and T1 post height so that the R/P envelope output is within the specification.
3. When the S1 and T1 posts are adjusted, first raise the post height and make small the entrance and exit side of the envelope, then down the post until envelope becomes flat.
4. With order to adjustment, basically adjust T1 post for makes flat at exit side of envelope first and adjust S1 post.
5. After finish this adjustment, unload the tape and load the tape again, then confirm the shape of Envelope waveform does not changed.

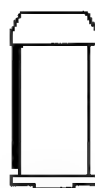


5-14 Post Limit Confirmation (PLAY)

SPEC	Post limit shown in the table No tape curl
MODE	PLAY
TAPE	Blank Tape
TOOL	VFK1149(Post Driver) VFK1151(Nut Driver)

1. Confirm that the tape pass limit follow the as shown as below table and adjust it in case of need.
2. Confirm that the kinds of D、E and F condition do not appeared on the tape as shown in figure.

Post	Limit	Adjustment
S5	Lower limit or Free	S5 Post Height
S4	Lower Limit	S4 Post Height
S1	Upper Limit	Envelope waveform
T1	Upper Limit	Envelope waveform
T3	Lower Limit	T3 Post Height
T4	Lower limit or Free	T4 Post Height



A: UPPER



B: FREE



C: LOWER



D: Curl



E: Bend



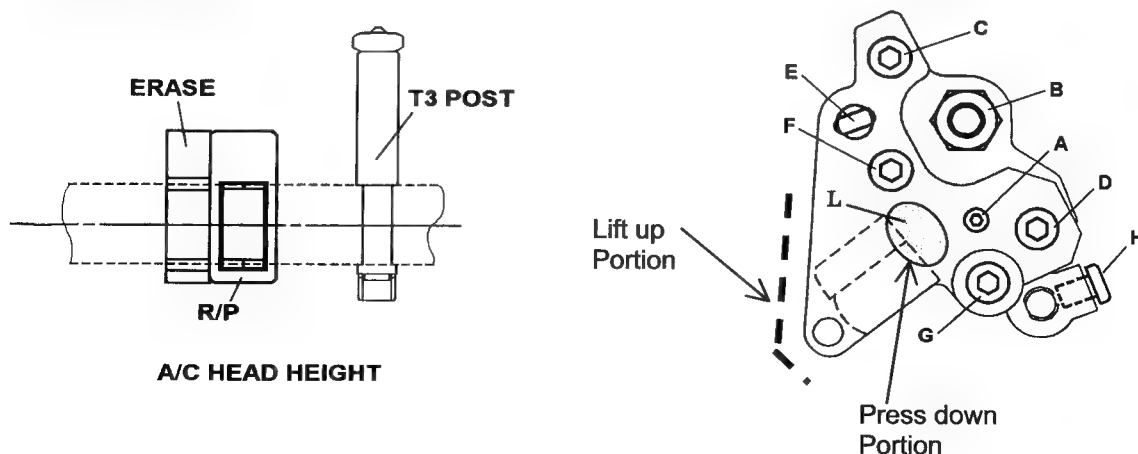
F: Drop

5-15. A/C Head Adjustment Method

Adjustment Item	SCREW	Adjustment Method	Torque
Tilt adjustment	A	Tighten direction . . . Decrease CUE Loosen direction . . . Increase CUE	
Height adjustment	B	Tighten direction . . . In case of increase CTL, when A/C Head Press down. Loosen direction . . . In case of increase CTL, when A/C Head lift up.	
Azimuth adjustment	F	Phase is adjusted by screw F	
X-value adjustment	C D	Adjust X-value by VFK0357 at Hole (E), then tighten the screw (C) and (D) to fix A/C Head horizontal position.	2.5Kg.cm
Fixed Tilt and Azimuth	G	Screw (G) is always tighten during adjustment except Tilt and Azimuth.	1.0Kg.cm
Fixed height	H	After height adjustment, tighten the screw (H) to fix height of A/C Head.	

SCREW	Tool for adjustment
A	VFK1178 (0.89mm Hex Driver)
B	VFK1150 (5.5mm Tool for adjustment)
F	VFK1148 (1.5mm Hex Driver)
C,D,G	VFK1209 (Torque Driver) VFK1375 (1.5mm Post Axis Driver)
H	VFK1190 (1.5mm L type of Hex Wrench)

1. Each adjustment of A/C Head should be perform under the screw (G) tightened.
2. Confirm the screw (A) does not loosen, before execute the A/C Head Tilt adjustment. The screw (A) should be always touch to top of A/C Head.
3. Be careful the tape damage at T3 Post, when adjust tilt of A/C Head.
4. When the height of A/C Head is adjusted by Nut (B), first the screw (H) should be loosen. And after height adjustment finished, tighten the screw (H) lightly.
5. Each adjustment of A/C Head should be finished at the condition of turn the each adjustment screw tighten direction. And hit the portion (L) lightly for remove the distortion.
6. Adjust alternately each A/C Head adjustment with Envelope Waveform adjustment.



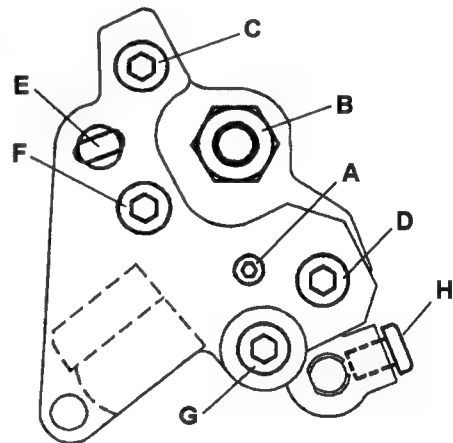
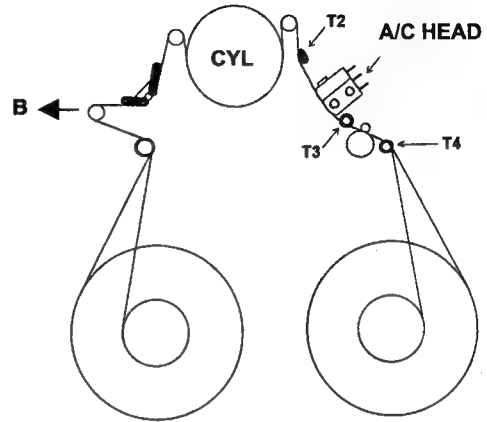
5-16. A/C Head Tilt Adjustment

SPEC	Lower limit at T3 Post No tape curl
ADJUSTMENT	SCREW A and G (A/C Head)
MODE	PLAY
TAPE	Blank Tape
M.EQ	VFK1148, VFK1178(Hex Driver)

1. Play back the tape and adjust screw(A) for adjustment of tilt of A/C Head so that the tape path has lower limit without curl at T3 post.
2. To adjustment, loosen the screw (G) and make curl on tape at lower flange of T3 post by screw (A). And tighten screw (A) accordingly for find the point of curl disappeared. After finish adjustment for screw (A), tighten the screw (G) is tightened with 1.0Kg/cm of torque.

(NOTE)

1. In case of turn clockwise screw (A).
→ Tape goes up at T3 post.
In case of turn counter-clockwise screw (A).
→ Tape goes down at T3 post.
2. When screw adjustment finished, with each adjustment screw on A/C Head should be finished tighten direction. And confirm that the screw does not loosen.
3. Adjust and confirmation should be performed alternately with each A/C head adjustment(Azimuth and Height).



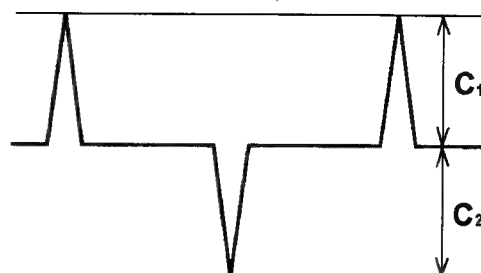
5-17. A/C Head Height adjustment

BOARD	SERVO
SPEC	CTL Output ($C_1, C_2 \geq 1.8V$)
TEST POINT	TP30:CTL
ADJUSTMENT	SCREW B and H (A/C Head)
MODE	PLAY
TAPE	NTSC: VFM3580KM (14min to 22min) PAL: VFM3680KM (14min to 22min)
M.EQ	Oscilloscope
TOOL	VFK1150(Nut Driver) VFK1190(Hex Wrench)

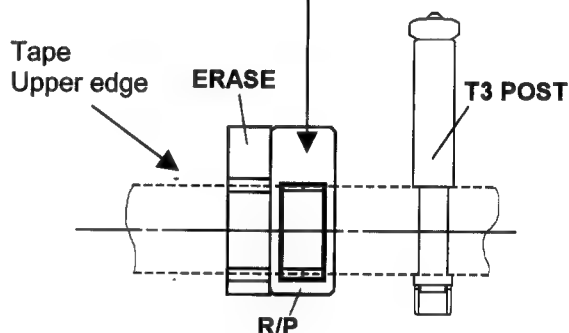
1. Observe the CTL output (TP30) on the Servo board.
2. Press and Lift up to A/C Head lightly as indicated as figure position, then confirm that the CTL output level is decreased.
3. If increases CTL output, when press the A/C Head. Loosen the screw H and adjust the screw B counterclockwise until CTL output is maximized.
4. If increases CTL output, when lift up the A/C Head. Loosen the screw H and adjust the screw B clockwise until CTL output is maximized.
5. After tightening the screw H(2.0kg), confirm the level again.

< NOTE >

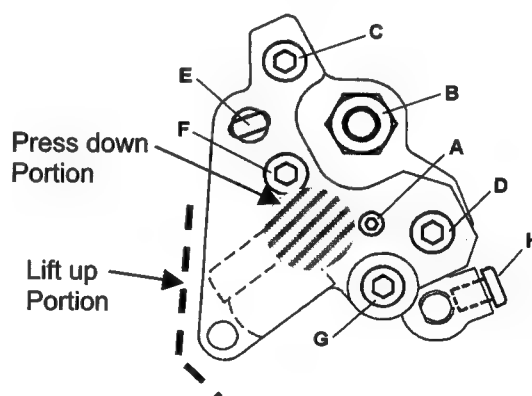
1. Adjust alternately with other A/C head adjustments(Azimuth, Height).



Upper edge of CUE R/P Head
(Upper edge of white portion)



A/C HEAD HEIGHT



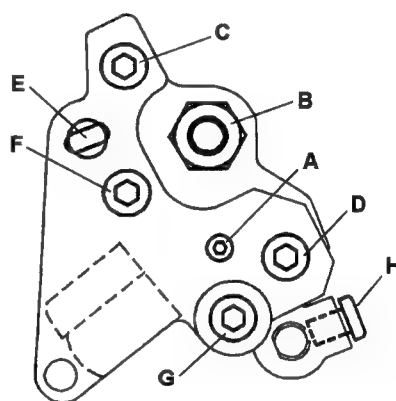
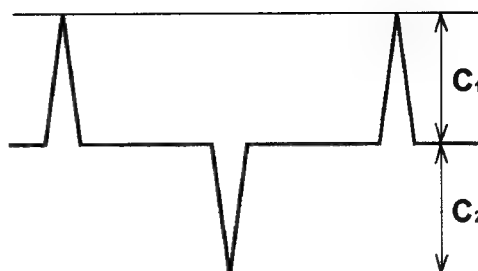
5-18. A/C Head Azimuth Adjustment

BOARD	SERVO
SPEC	CTL Output: C1, C2 = C1 max, C2 max
TEST POINT	TP30: CTL
ADJUSTMENT	SCREW F (A/C Head)
MODE	PLAY
TAPE	NTSC: VFM3580KM (14min to 22min) PAL: VFM3680KM (14min to 22mi)
M.EQ	Oscilloscope
TOOL	VFK1148(Hex Driver)

1. Observe the CTL output (TP30) on the Servo Board.
2. To adjustment, loosen the screw (G) and adjust screw (F) so that the CTL output become maximum.
3. Tighten screw (G) with 1.0Kg torque.

< NOTE >

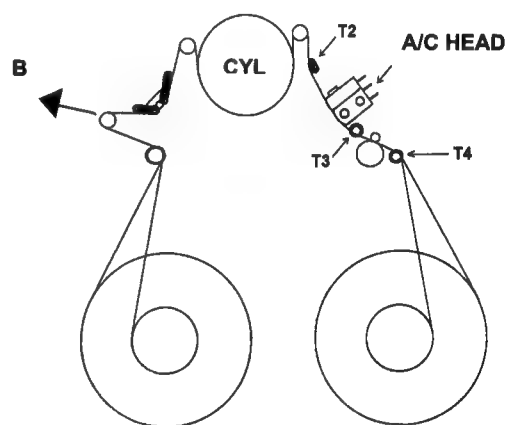
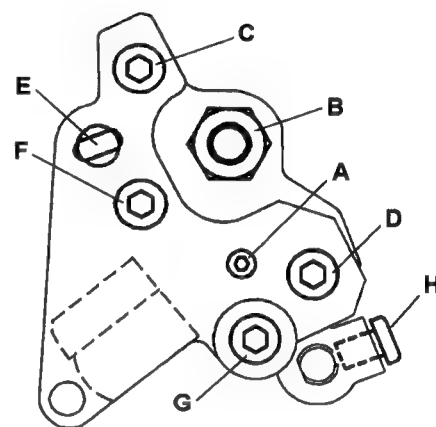
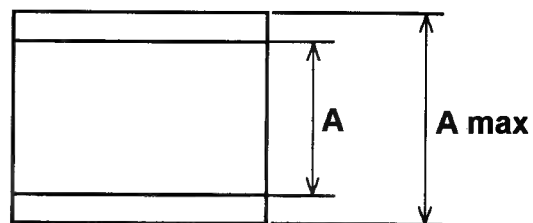
1. Adjust alternately with other A/C head adjustments(Azimuth, Height).



5-19. A/C Head Tilt Confirmation

SPEC	$A/A_{max} \geq 0.8$
TEST POINT	TP381:CUE (ADDA CUE Board:H2)
ADJUSTMENT	SCREW A and G (A/C Head)
MODE	PLAY
TAPE	NTSC: VFM3580KM (14min to 22min) PAL: VFM3680KM (14min to 22min)
M.EQ	Oscilloscope
TOOL	VFK1178、VFK1148(Hex Driver)

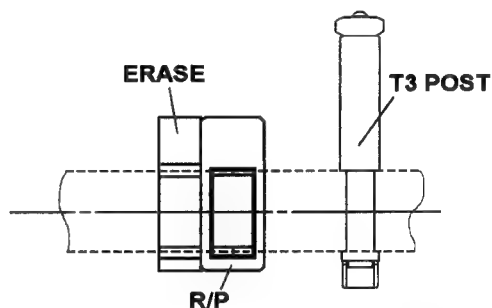
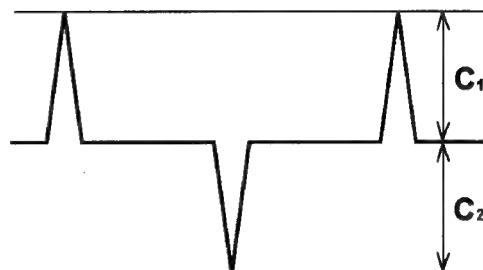
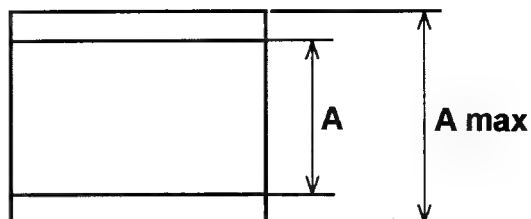
1. Playback the Alignment tape.
2. Confirm that the screw G and H are not loosened.
3. Push the tension arm follow the arrow (B) direction as shown in figure as range of T2 post does not move. And confirm that the CUE output level is within specification.
4. If out of specification, loosen the screw G and adjust the screw A, then tighten the screw G with 1.0kg torque.
5. The final touch of the adjustment must be turned clockwise. After this adjustment, confirm that the screw A is not loosened.
6. If adjust the screw A, Confirm that the tape pass condition follow Post Limit Confirmation procedure (item 5-14).



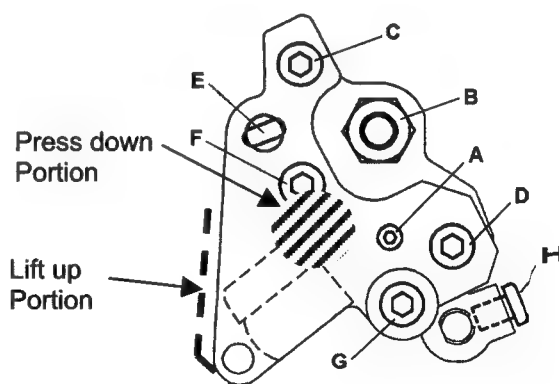
5-20. A/C Head Height Confirmation

SPEC	$A \geq 0.95 \times A_{max}$, $C_1, C_2 \geq 1.8V$
TEST POINT	TP381 CUE (ADDA CUE Board:F8) TP30 CTL (SERVO Board:F1)
ADJUSTMENT	SCREW B and H(A/C Head)
MODE	PLAY
TAPE	NTSC: VFM3580KM (14min to 22min) PAL: VFM3680KM (14min to 22min)
M.EQ	Oscilloscope
TOOL	VFK1150(Nut Driver) VFK1190(Hex Wrench)

1. Playback the Alignment tape.
2. Press and Lift up to A/C Head lightly as indicated as figure position, then confirm that the CUE output level at TP381 does not increased.
3. If increases CUE output, A/C Head Height adjustment performed. And also confirm that the CTL output level.
4. If adjust the height of A/C Head, Azimuth also changed. Therefore adjust and confirm alternately Height and Azimuth of A/C Head.
5. After screw (H) is tightened, height and tilt of A/C Head are changed. Therefore confirmation of specification must be done after tightening the screw (H).



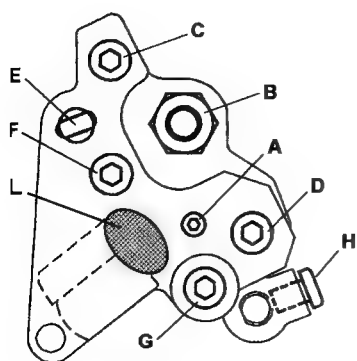
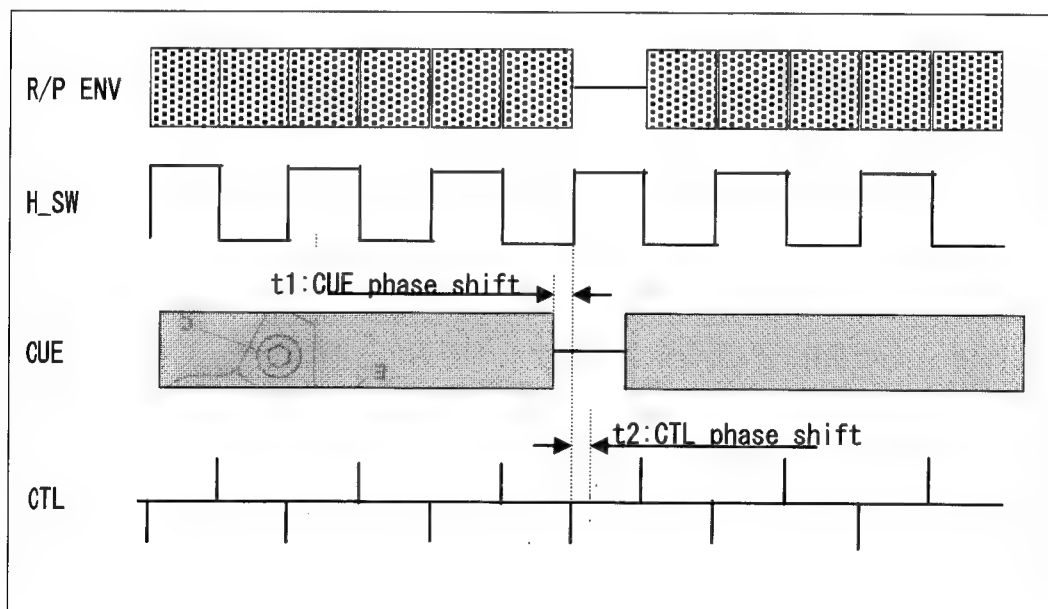
A/C HEAD HEIGHT



5-21. A/C Head Azimuth and X-value Adjustment.

SPEC.	As shown in below figure. $250\mu s \leq t_1, t_2 \leq +250\mu s$	TEST POINT	TP16 :RP ENV (RF AMP Board:H4) TP233:RP HSW (SERVO Board:F1) TP381:CUE AUDIO (ADDA CUE Board:F8) TP30 :CTL (SERVO:F1)
ADJUSTMENT	A/C Head each screws		
MODE	PLAY SERVO ADJUST: A07:RP LINEAR P	M.EQ	Oscilloscope
TAPE	NTSC: VFM3582KM (X-value) PAL: VFM3682KM (X-value)	TOOL	VFK0357 (Eccentric Screwdriver)

1. Open the Service menu and select the item "A07:RP LINEAR P" on Servo Adjust menu for RP Head ATF Playback.
2. Playback the X-value Alignment tape.
3. Confirm that the phase of CUE and CTL are within specification against RP HSW pulse trigger. If not perform the X-value adjustment follow the below procedure.
4. Adjust A/C Head Azimuth (refer to Azimuth adjustment procedure) so that the CTL and Lack part of CUE(t2) is match in the phase.
5. Confirm the lack track of envelope, and select the HSW correspond with it (The lack track is correspond HSW high with L ch).
6. Adjust X-value so that the reference of HSW and CTL trigger (CTL falling edge is the reference: refer to below figure) are match in the phase(t1). To adjust X-value, loosen the screw C and D, adjust the hole E by VFK0357. After adjustment tighten the screw C and D with 2.5Kg torque. At this time adjust the phase simultaneously with Azimuth so that the CTL and CUE phase is kept.
7. Hit the top plate (portion L as shown in below figure) of A/C Head lightly by a pointed end of Eccentric driver , then confirm the phase is not shifted finally.



5-22. REV Tape Pass Confirmation and Adjustment (T4 post height adjustment)

SPEC.	C1, C2 \geq Cp1, Cp2 \times 0.75 Lower limit at T3 post on REV mode	TAPE	NTSC: VFM3580KM PAL: VFM3680KM
TEST POINT	TP30(SERVO:F1)	M.EQ	Oscilloscope
ADJUSTMENT	T4 post height	TOOL	VFK1151(Nut Driver)
MODE	REV \times 1		

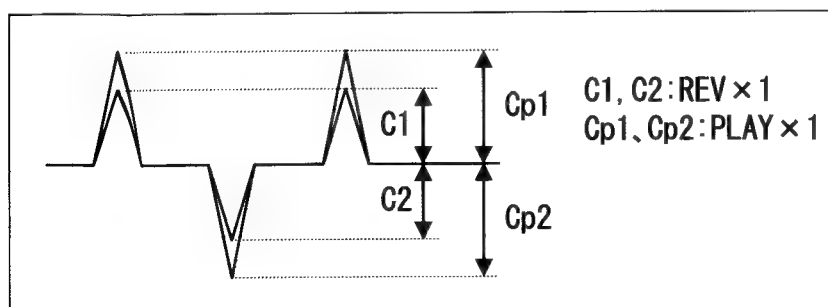
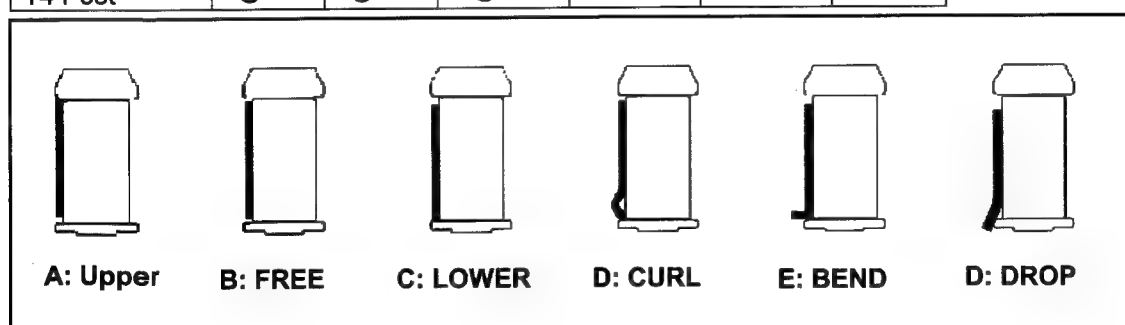
1. Place unit into REV mode, and confirm the post limit and CTL signal are in the specification. IF not, adjust T4 post follow the below procedure.
2. Turn the Nut of T4 post clockwise or counter-clockwise follow the tape limit condition at T3 post. The maximum rotation angle is 90 degree.
3. Place unit into REV X1 mode and confirm the CTL output level is become more than 75% on play mode.
Confirm the tape pass limit become lower limit at T3 post and the tape does not have curl at T3 and T4 post.
4. However out of specification, adjust T4 post height follow the Post Height Pre-adjustment procedure.

T4 Nut adjustment direction

Direction of adjustment nut of T4 post	CTL level on REV mode	Lower limit at T3 post On REV mode
Tighten direction	Increase	Tape touch to strong
Loosen direction	Decrease	Tape touch to weak

Post Limit

Post Name	Tape limit					
	A	B	C	D	E	F
T3 Post	x	x	O	x	x	x
T4 Post	O	O	O	x	x	x

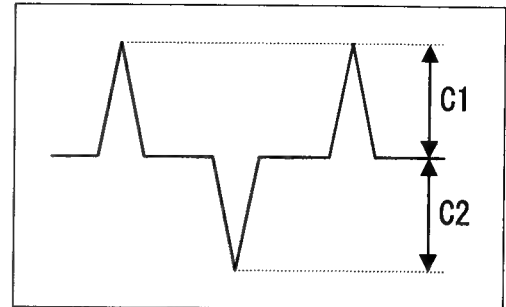


5-23. CTL Self Recording Level Confirmation

SPEC.	Refer to below table
TEST POINT	TP30 (SERVO Board)
MODE	REC and PLAY
TAPE	Blank tape
M.EQ	Oscilloscope

NOTE: This confirmation should be done after each screws of A/C Head are fixed.

1. Record the blank tape.
2. Playback the recorded portion and confirm the CTL level is within specification as shown as below table on PLAY and REV X1 mode.



CTL Output Level C1,C2

PLAY	REV × 1	REV × 0.2
$C1, C2 \geq 1.8V$	$C1, C2 \geq 1.4V$	$C1, C2 \geq 1.2V$

1. PLAY NG → Re-confirm the A/C Head height adjustment.
2. REV NG → Re-confirm the T4 post adjustment.

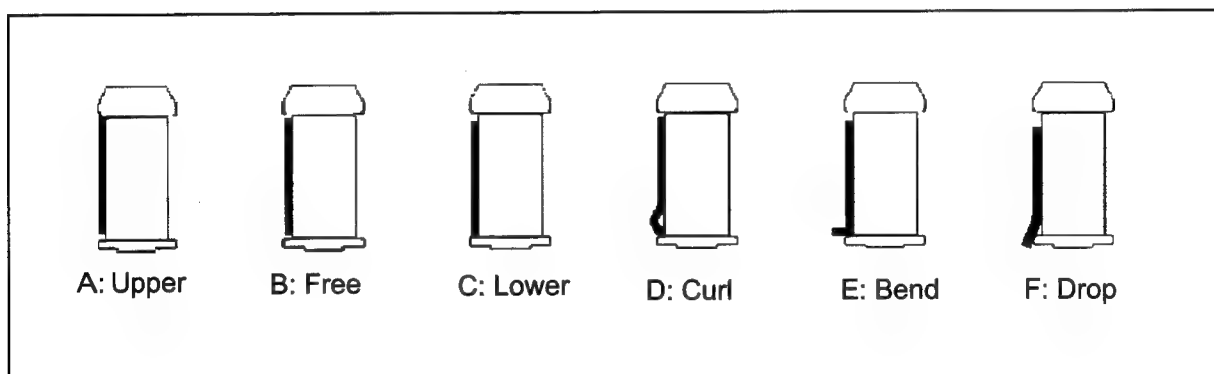
CTL Output Level C1,C2

5-24. PLAY Tape Pass Limit Confirmation

SPEC.	Each Post limit shown in table
MODE	PLAY
TAPE	M cassette (MP tape) tape. Tape beginning and end portion

Post Name	Tape Limit (Refer the figure)						Adjustment	
	A	B	C	D	E	F		
S5 post	X	O	O	X	X	X	S4, S5 Post	Post Height Pre-Adj.
S4 post	X	X	O	X	X	X		
S1 post	O	X	X	X	X	X	S1 Post	Envelope waveform Adj.
T1 post	O	X	X	X	X	X	T1 Post	Envelope waveform Adj.
T3 post	X	X	O	X	X	X	A/C Head tilt	A/C Head tilt Adj.
T4 post	X	O	O	X	X	X	T4 Post	Post Height Pre-Adj

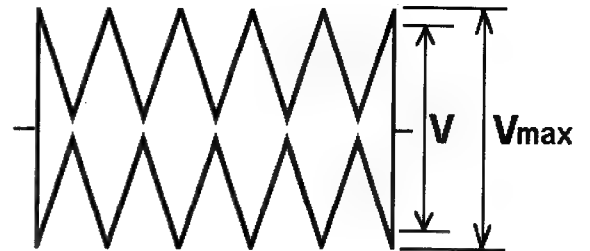
1. Place unit into PLAY mode and confirm the each post limits is within specification.
2. If out of specification, adjust the post height follow the each adjustment procedure (Refer to above table).



5-25. Confirmation of Envelope on REV,REW and FF mode.

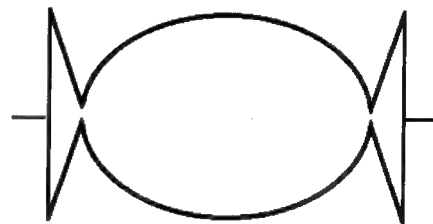
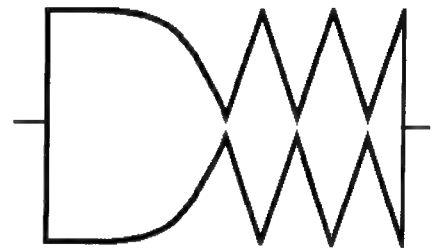
SPEC.	$V/V_{max} \geq 0.9$
TEST POINT	TP16 :RP ENV (RF AMP Board:H4)
MODE	REV, REW, FF
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Oscilloscope

- Confirm that the Envelope waveform becomes in the specification on REV,REW and FF mode as refer to figure and below.
 - Waveform must be Diamond Style.
 - All the peak level must be more than 90% of maximum level.
 $V/V_{max} \geq 0.9$
- If out of spec, adjust S4 post height.



OK

NG



6-19. Distinction SW Unit Replacement

(Removal)

1. Remove the Top Case Unit.
2. Remove the Front Loading Unit.
3. Remove the Bottom Case Unit.
4. Open the P.C.Board Unit and remove the Shield Plate.
5. Disconnect the connector P17 on Servo P.C.Board.
6. Unscrew the 3 screws (A) and remove the Distinction SW Unit as shown in Figure 6-19-1.

(Installation)

1. Install the new Distinction Switch Unit follow the removal steps in reverse order.
2. Confirm that the M and L cassettes touch to Distinction Switch Unit correctly.

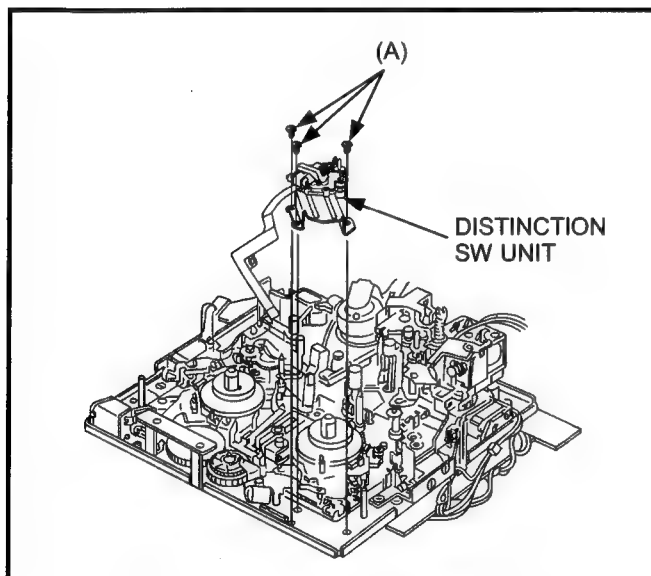


Fig. 6-19-1 Removal of Distinction Switch Unit

6-20. Reel Drive Motor Unit Replacement

(Removal)

1. Remove the Top Cover.
2. Remove the Front Loading Unit.
3. Disconnect the connector P16 on the Mech I/O P.C.Board. as shown in Figure 6-3-1.
4. Unscrew the 2 screws (A) and remove the Reel Drive Sensor P.C.Board as shown in Figure 6-19-1.
5. Unscrew the 2 screws (B) and remove the Reel Drive Motor Unit as shown in Figure 6-20-1.

(Installation)

Install the new Reel Drive Motor Unit follow the removal step in reverse order.

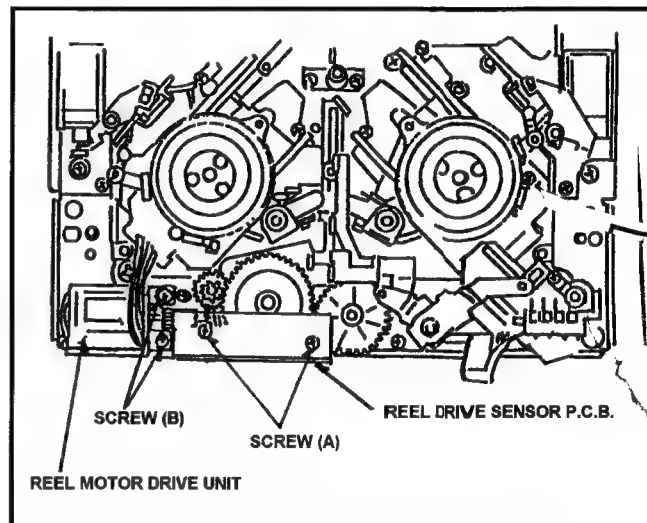


Fig.6-20-1 Removal of Reel Drive Motor Unit

6-17-2.Cleaner Roller Position Adjustment

※ Tools Required : Eccentric Driver (VFK0357)

1. Observe the clearance (A) between Cleaner Roller and cylinder Unit as shown in Figure 6-15-3. And make sure that it is within 1.0 to 1.2mm.
2. If not, loosen the 2 screws (B) and adjust the position of Cleaner Base Plate by moving arrow direction (A ⇌ A) using the Eccentric driver so that the clearance (A) is within specification. And tighten the 2 screws (B).

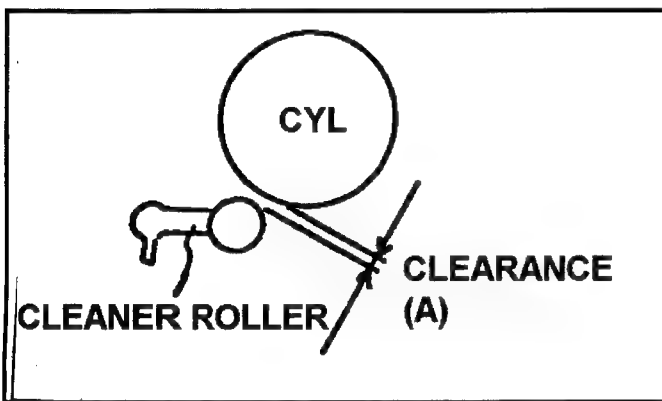


Fig.6-17-4 Cleaner Roller Position Adjustment

6-18. M-Stopper Solenoid Replacement and Adjustment

(Removal)

1. Remove the Top Cover.
2. Remove the Front Loading Unit.
3. Remove the connector P24 on the Mech I/F P.C.Board as shown in Figure 6-3-1..
4. Unscrew the 4 screws (A) and (B) and remove the M-Stopper Solenoid as shown in Figure 6-18-1.

(Installation)

1. Install the new M-Stopper Solenoid follow the removal steps in reverse order.
2. After installation, position adjustment should be performed as follows.

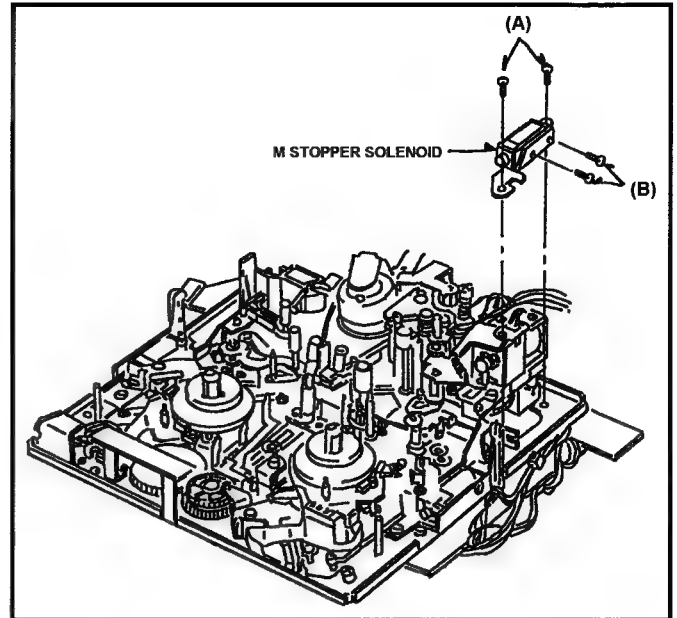


Fig.6-18-1 Removal of M-Stopper Solenoid

(Adjustment)

1. Place the reels in the L size position.
2. Push the iron core of M-Stopper Solenoid by hand.
3. Observe the clearance (A) between Mech Chassis and M-Stopper as shown in Figure 6-18-2. And make sure that it is within 1.1 to 1.3mm.
4. If not, loosen the 2 screws (A), which fixed M-Stopper Solenoid. And adjust the position of M-Stopper Solenoid so that the clearance (A) is within specification. And tighten the 2 screws (A).

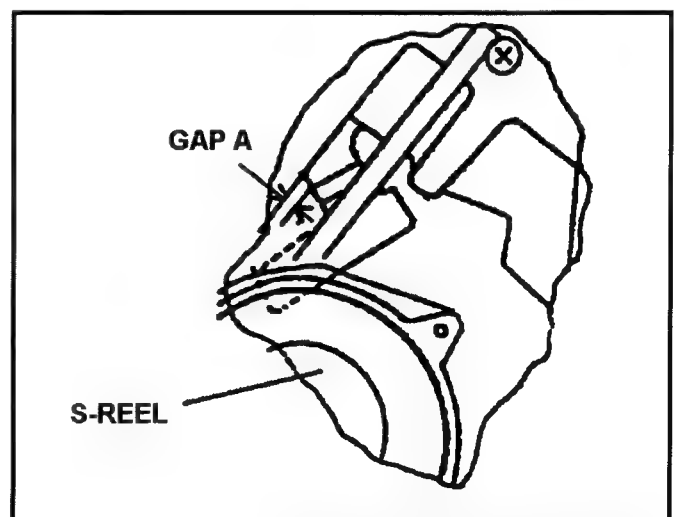


Fig.6-18-2 M-Stopper Solenoid Position Adjustment

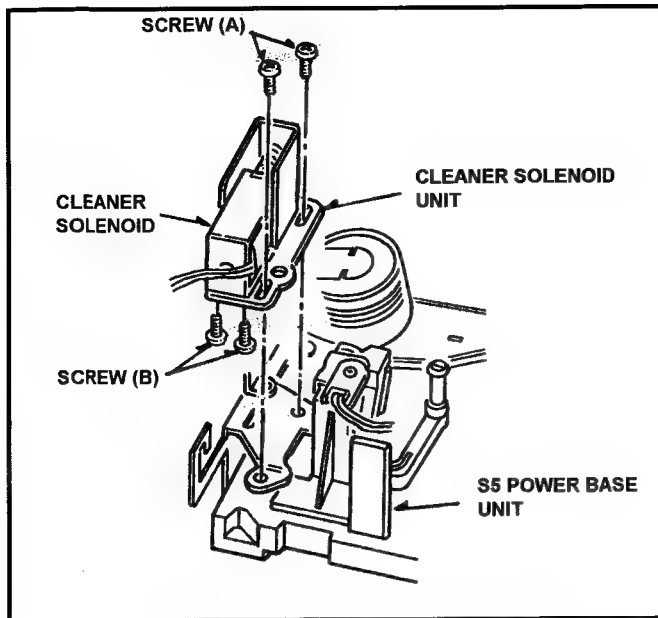


Fig.6-17-1 Removal of Cleaner Solenoid

6-17-1. Cleaner Solenoid Position Adjustment

※ Tools Required : Eccentric Driver (VFK0357)

1. Press the iron core of Cleaner Solenoid.
2. Observe the clearance (D) between Cleaning Arm Unit and Cleaner Base Plate as shown in Figure 6-15-2. And make sure that it is within 0.5 to 0.7mm.
3. If not, loosen the 2 screws (A) and adjust the position of Cleaner Solenoid Unit by moving arrow direction (C↔C) using the Eccentric drive so that the clearance (D) is within specification. And tighten the 2 screws.
4. After adjustment, confirm that as follow.
5. Press the iron core of Cleaner Solenoid and released it, then the Cleaning Roller is return to original position.
6. Press the iron core of the Cleaner Solenoid and confirm that the Cleaner Roller is rotated, when the Cylinder is rotated by hand.

Note: If remove the cleaner Base Plate, Cleaner roller Position adjustment should be performed.

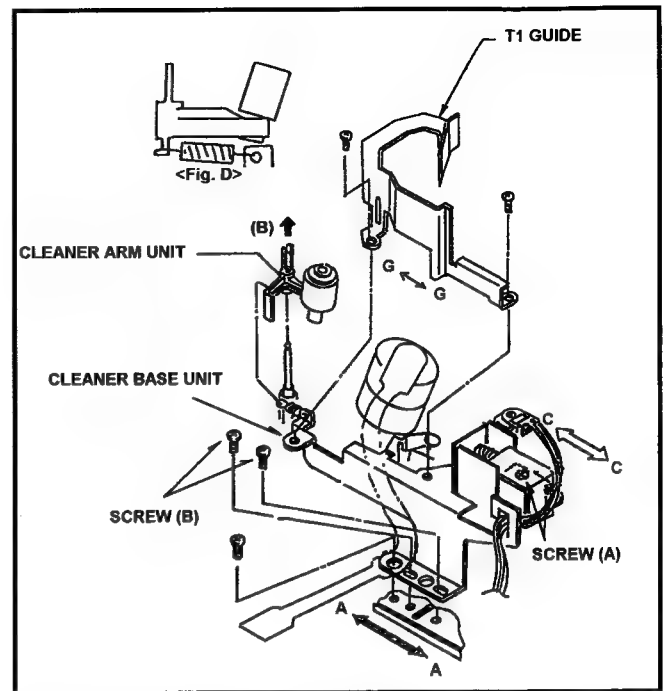


Fig.6-17-2 Cleaner Solenoid Position Adjustment (1)

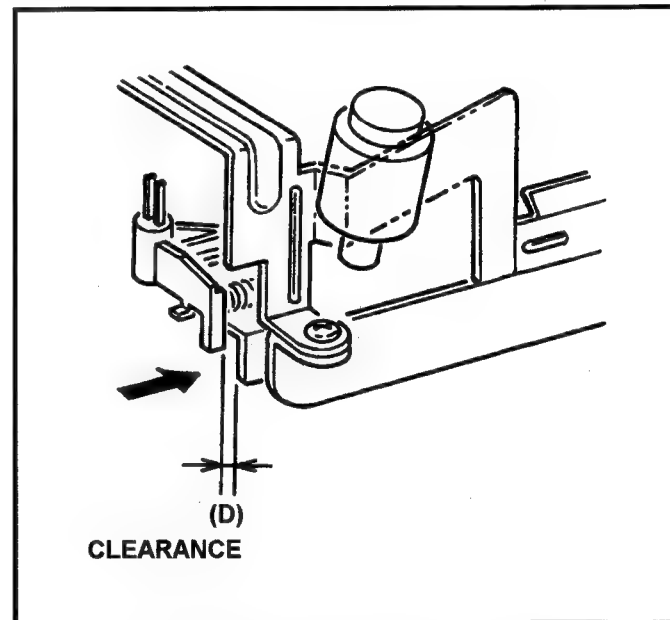


Fig.6-17-3 Cleaner Solenoid Position Adjustment (2)

6-15. T1 Boat Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Unscrew the screw (C) and remove the T1 Post from Loading Rail as shown in Figure 6-14-1.
4. Hang off the T1 Boat Unit from T1 Loading Arm Unit as shown in Figure 6-14-1.

(Installation)

1. Install the new T1 Boat Unit follow the removal steps in reverse order.
2. After installation confirm that the T1 Post moving smoothly on the Loading Rail.

Linearity adjustment (Refer to item 5-12 [Tape Pass Adjustment Procedure]) should be performed.

6-16. T1 Loading Arm Unit Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the cylinder Unit (Refer to item 6-1).
4. Move the T1 Post to loading direction by manual ejecting method until the screw (D) can be removal position as shown in Figure 6-14-1.
5. Unscrew the 2 screws (A) and (C), then remove the S1 and T1 Post from Loading Rail as shown in Figure 6-14-1.
6. Unscrew the 2 screws (D) and (E), then remove the Loading Rail as shown in Figure 6-14-1.
7. Remove the T1 Loading Arm Unit as shown in Figure 6-14-1.

(Installation)

1. Install the T1 Loading Arm Unit follow the removal steps in reverse order, then Phase Adjustment should be performed as follows.

Note: This replacement should be performed simultaneously, replacement of Cylinder Unit. It is convenience for Replacement of T1 Loading Arm Unit.

(Adjustment)

1. When install the T1 Loading Arm Unit, then the hole (A) should be matched hole (B) as shown in Figure 6-16-1.
2. After installation confirm that the S1 and T1 Post moving smoothly on the Loading Rail.
3. Post Height Pre-adjustment (Refer to item 5-3) and Linearity adjustment (Refer to item 5-12 [Tape Pass Adjustment Procedure]) should be performed.

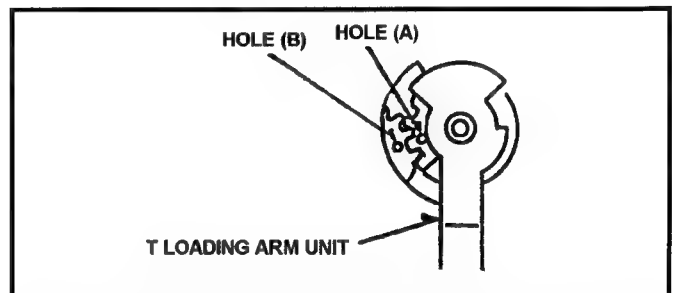


Fig.6-16-1 Phase Adjustment of T1 Loading Arm Unit

6-17. Cleaner Solenoid Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Disconnect the connector P11 on the Mech I/F P.C.Board.
4. Unscrew the 2 screws (A) and remove the Cleaner Solenoid Unit as shown in Figure 6-17-1.
5. Unscrew the 2 screws (B) and remove the Cleaner Solenoid as shown in Figure 6-17-1.

(Installation)

1. Install the new Cleaner Solenoid follow the removal steps in reverse order.
2. After installation, Cleaner Solenoid Position adjustment should be performed as follows.

6-14. S1 Post Loading Arm Unit Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the S5 Post Base Unit (Refer to item 6-12).
4. Remove the Tension Arm Unit(Refer to item 6-13).
5. Unscrew the screw (A) and remove the S1 Post from Loading Rail as shown in Figure 6-14-1.
6. Remove the Cut Washer (B) and remove the S1 Loading Arm Unit as shown in Figure 6-14-1.

(Installation)

1. Install the new S1 Loading Arm Unit follow the removal steps in reverse order, then S1 Post Loading Arm Unit Phase Adjustment should be performed as follows.
2. After installation, confirm that the S1 Post moving smoothly on the Loading Rail.
3. Tension Arm (Refer to item 5-5), Post Height Pre-Adjustment (Refer to item 5-4) and Linearity Adjustment. (Refer to item 5-12 [Tape Pass Adjustment Procedure]) should be performed.

(Adjustment)

1. When install the S1 Post Loading Arm Unit, then the hole (A) should be matched hole (B) as shown in Figure 6-14-1.

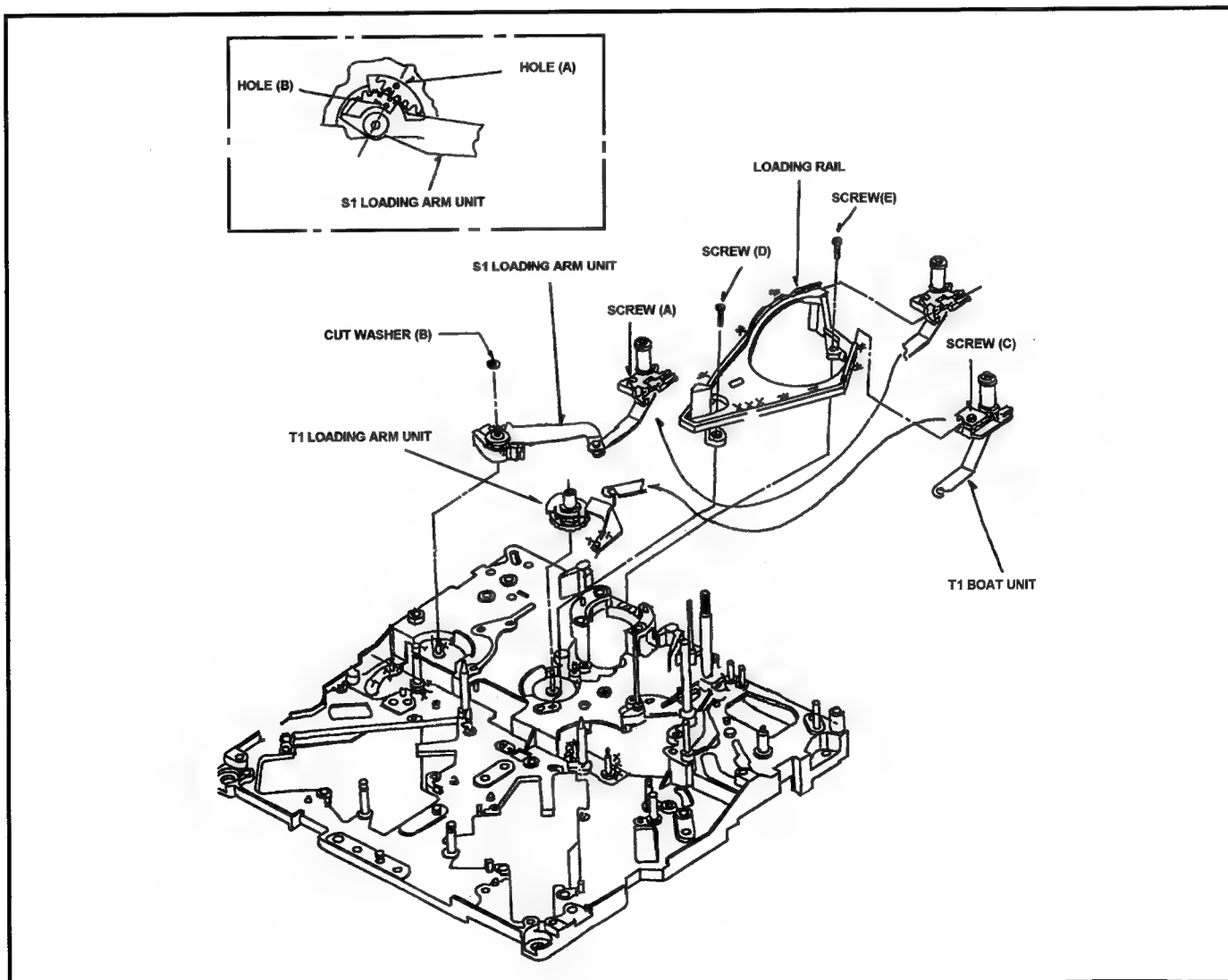


Fig.6-14-1 Removal of S1 Post Loading Arm Unit

6-12. S5 Post Base Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Unscrew the screw (A) and remove the S5 Post Base Unit as shown in Figure 6-12-1.

(Installation)

1. Install the S5 post Base Unit follow the removal steps in reverse order, then be careful the S5 Post Base Unit is install to mech chassis as shown in Figure 6-12-1.
2. After installation, Post Height pre-adjustment (Refer to item 5-4) and Linearity adjustment (Refer to item 5-12 [Tape Pass Adjustment Procedure]) should be performed.

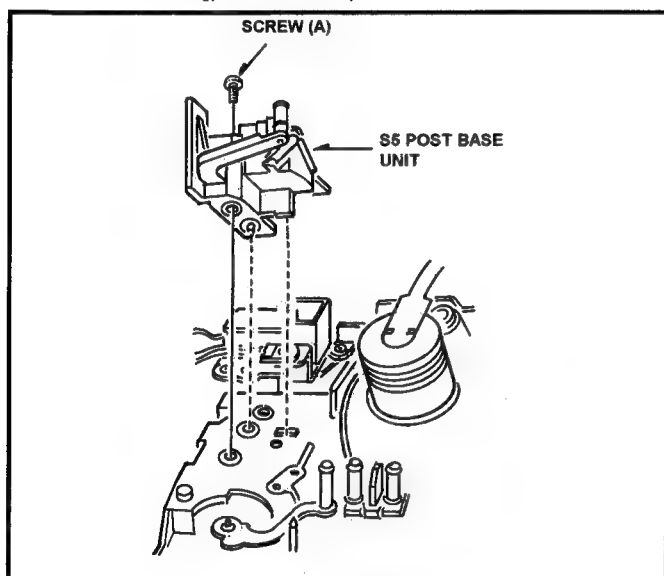


Fig.6-12-1 Removal of S5 Post Base Unit

6-13. Tension Arm Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Cut Washer (A) and hang off the Tension Regi Spring, then remove the Tension Arm Unit as shown in Figure 6-13-1.

(Installation)

1. Install the new Tension Arm Unit follow the removal steps in reverse order.
2. After installation, Tension Arm Adjustment should be performed the following steps.

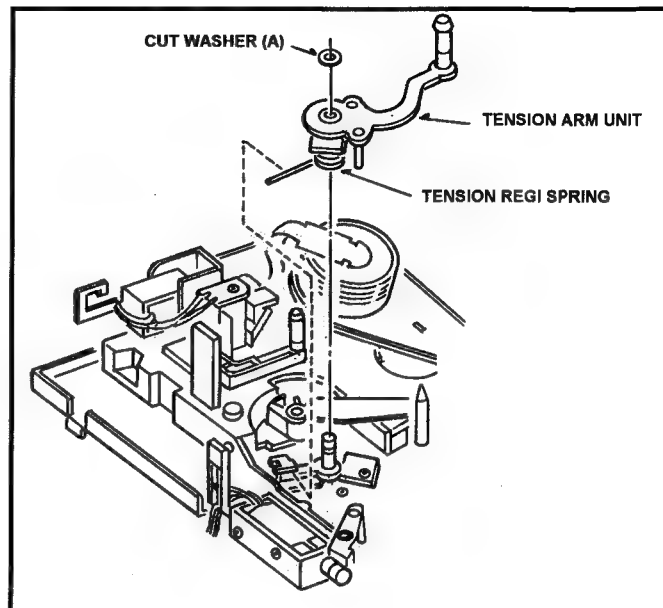
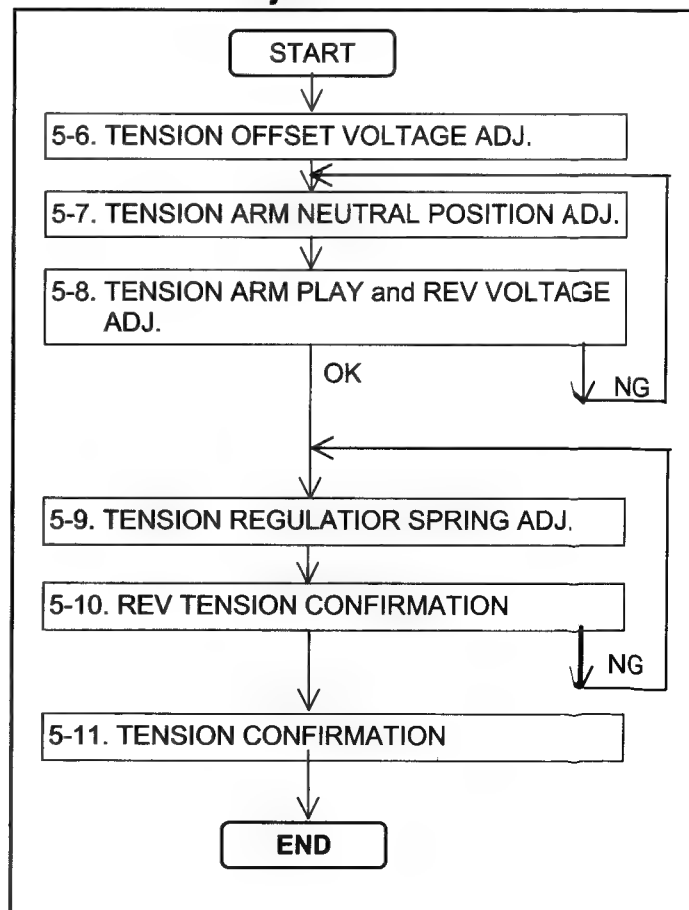


Fig.6-13-1 Removal of Tension Arm Unit

Tension Arm Adjustment Flowchart



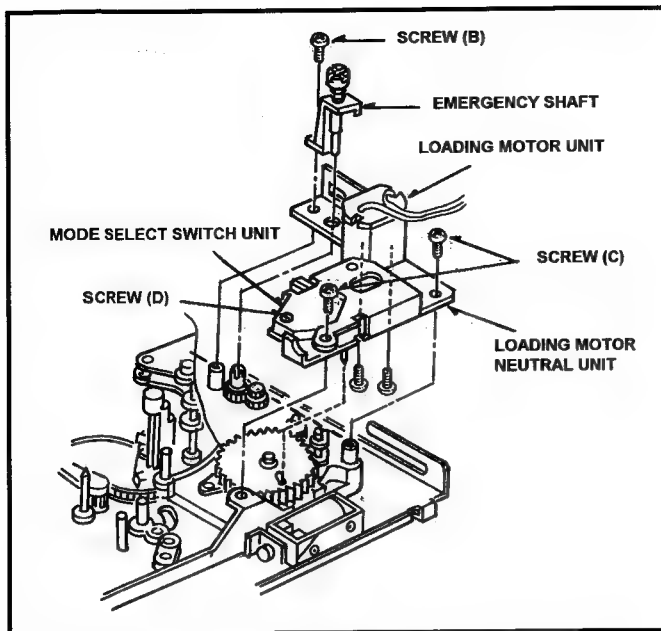


Fig.6-10-1 Removal of mode Select Switch Unit

6-11. Main Cam Gear Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Pinch Solenoid Unit (Refer to item 6-7) and Loading Motor Neutral Unit (Refer to item 6-9).
4. Remove the Main Cam Gear as shown in Figure 6-11-1.

(Installation)

1. Install the Main Cam Gear, then the pin of Main Cam Arm Unit (※) should be matched with the groove position of Main Cam Gear as shown in Figure 6-11-1.
2. Follow the removal steps in reverse order.
3. After installation, Pinch Solenoid Position Adjustment is required (Refer to item 5-2).

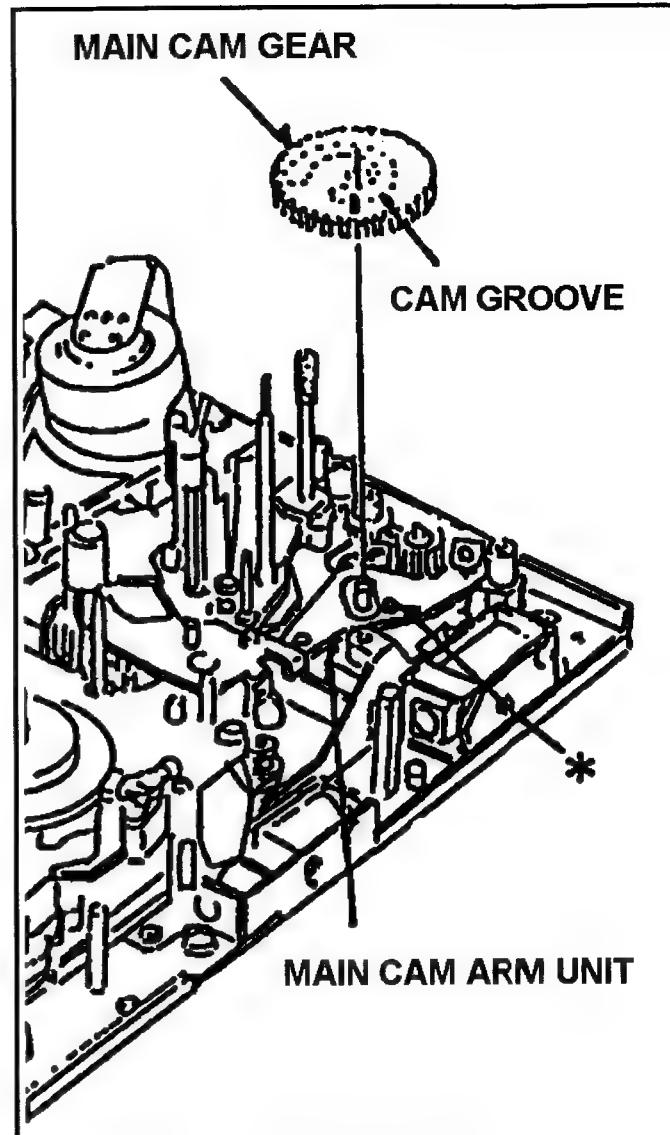


Fig.6-11-1 Removal of Main Cam Gear

6-9. Loading Motor Unit Replacement

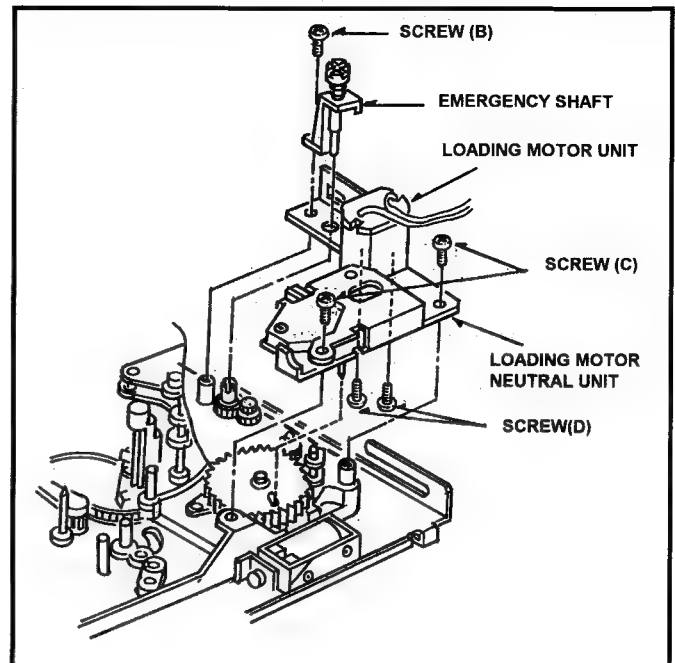
(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P21 on Mech I/F P.C.Board as shown in Figure 6-3-1.
5. Remove the Pinch Solenoid Unit (Refer to item 6-7).
6. Remove the Pinch Solenoid Lever. (Refer to item 6-8).
7. Unscrew the screw (B), and remove the Emergency Shaft as shown in Figure 6-9-1.
8. Unscrew the 2 screws (C) and remove the Loading Motor Neutral Unit as shown in Figure 6-9-1.
9. Unscrew the 2 screws (D) and remove the Loading Motor Unit as shown in Figure 6-9-1.

(Installation)

1. Install the new Loading Motor Unit to Loading Motor Neutral Unit by tightening 2 screws (D).
2. Install the Loading Motor Neutral Unit by tightening the 2 screws (C), then be careful that the pin of Mode SW Unit should be matched to groove position of main Cam Gear.
3. Install the Emergency Shaft by tightening the screw (B).
4. Install the Pinch Solenoid Unit and after installation it, Pinch Solenoid Position adjustment is required. (Refer to item 5-2).
5. Connect the connector P21 on the Mech I/F P.C.Board. as shown in Figure 6-3-1.

Fig. 6-9-1 Removal of Loading Motor



6-10. Mode Select Switch Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P22 on the Mech I/F P.C.Board as shown as Figure 6-3-1.
5. Remove the Pinch Solenoid Unit and Loading Motor Neutral Unit (Refer to item 6-9).
6. Remove the screw (D) and remove the Mode Select Switch Unit from Loading Motor Neutral Unit as shown in Figure 6-10-1.

(Installation)

1. Install the New Mode Select Switch Unit follow the removal steps in reverse order (Please refer to item [6-9. Loading Motor Unit Replacement]).

Note: Be careful the pin of Mode Switch Unit should be matched to groove of Main Cam Gear.

2. After install the Pinch Solenoid Unit, Pinch Solenoid Position adjustment is required (Refer to item 5-2).

6-7. Pinch Solenoid Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P20 on the Mech I/F P.C.Board as shown in Figure 6-3-1.
5. Unscrew the 2 screws (A) and remove the Pinch Solenoid Unit as shown in Figure 6-7-1.
6. Unscrew the 2 screws (B) and remove the Pinch Solenoid Angle as shown in Figure 6-7-1.
7. Unscrew the 2 screws (C) and remove the Pinch Solenoid from the Pinch Solenoid Base.

(Installation)

1. Install the new Pinch Solenoid follow the removal steps in reverse order.
2. After installation, Pinch Solenoid Position Adjustment is required (Refer to item 5-2).

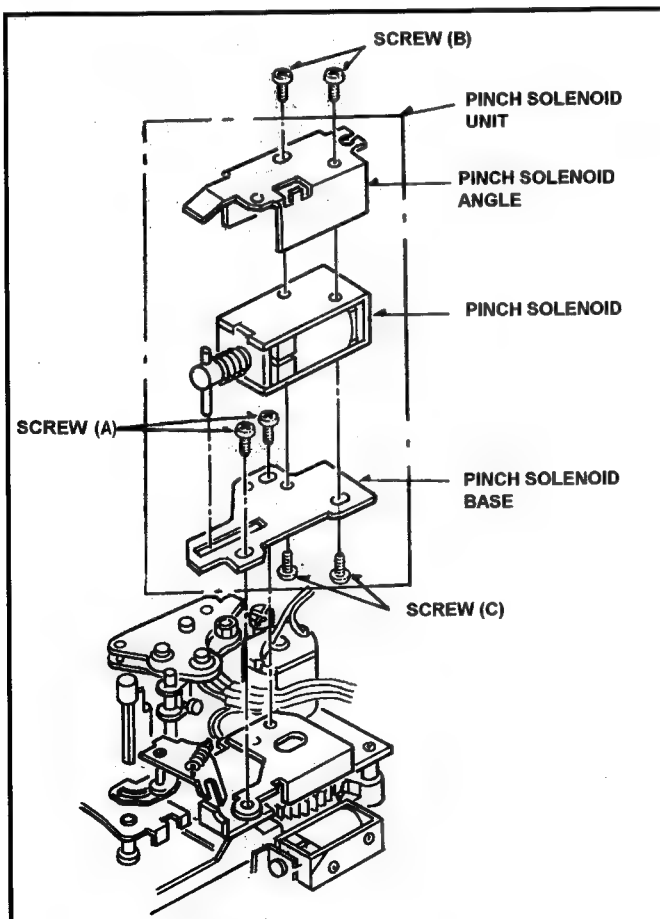


Fig.6-7-1 Removal Pinch Solenoid

6-8. Pinch Arm Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P20 on the Mech I/F P.C.Board as shown in Figure 6-3-1.
5. Remove the Pinch Solenoid Unit (Refer to item 6-9, then hang off the Pinch Solenoid Lever as shown in Figure 6-8-1.
6. Remove the cut washer (A) and remove the Pinch Solenoid Lever as shown in Figure 6-8-1.
7. Remove the cut washer (B) and remove the Pinch Arm Unit as shown in Figure 6-8-1.

(Installation)

Install the new Pinch Arm Unit follow the removal steps in reverse order then Pinch Solenoid Position Adjustment is necessary (Refer to item 5-2).

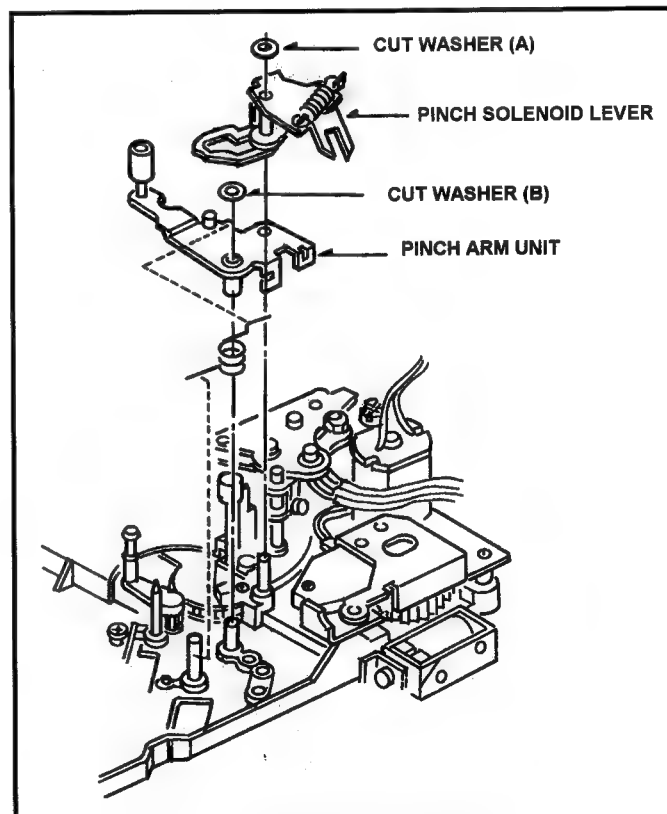


Fig.6-8-1 Removal of Pinch Arm Unit

(Adjustment)

1. Place the reels in the M cassette size position.
2. Observe the clearance (A) between Brake pad and it's turntable as shown in Figure 6-5-2. And make sure that it is within 0.2 to 0.5mm.
3. If not, loosen the 2 screws (A), which fixed supply and Take Up Brake Solenoid Unit. And adjust the position of Brake Solenoid Unit by moving arrow direction so that the clearance (A) is within specification. And tighten the 2 screws (A).
4. After adjustment, change the reel position to S and L cassette size, and confirm that the clearance (A) is within specification.

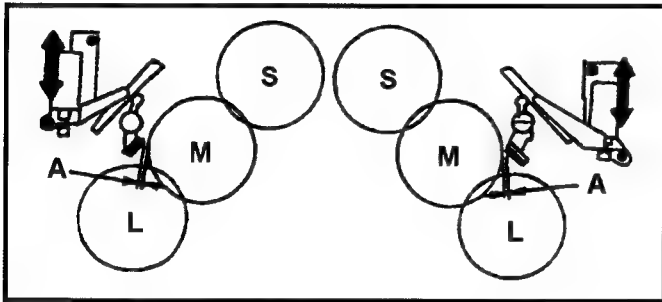


Fig.6-5-2 Brake Solenoid Adjustment

6-6. Take Up Brake Solenoid Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P18 on the Mech I/F P.C.Board. as shown in Figure 6-3-1.
5. Unscrew the 2 screws (A) and remove the Take Up Brake Solenoid Base Unit as shown in Figure 6-6-1.
6. Unscrew the 2 screws (B) and remove the Take Up Brake Solenoid from Take Up Brake Solenoid Base Unit as shown in Figure 6-6-1.

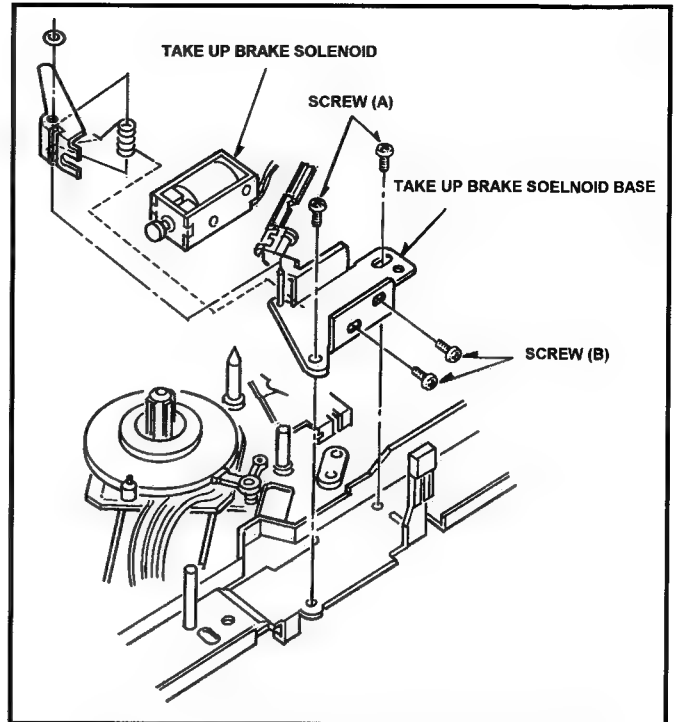


Fig.6-6-1 Removal of Take Up Brake Solnoid

(Installation)

1. Install the new Take up Brake Solenoid follow the removal steps in reverse order.

Note: Hang on the Take up Brake Spring as shown in Figure 6-6-1.

2. After installation, position adjustment should be performed as follows.

(Adjustment)

Please adjust the position of Take up Brake Solenoid Unit follow the adjustment procedure, which is described item 6-5.

6-4. Supply and Take Up Brake Arm Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Press the iron core of Brake Solenoid for release the Brake.
4. Remove the cut washers (A) and remove the supply and Take Up Brake Arm Unit as shown in Figure 6-4-1.

(Installation)

1. When install the new Brake Arm Unit first, hang on the Brake Arm Spring as shown in Figure 6-4-1.
2. Follow the previous steps in reverse order.
3. Main Brake Torque confirmation is required (Refer to item 5-3).
4. Confirm that the Tension value on the Playback mode (Refer to item 5-11).

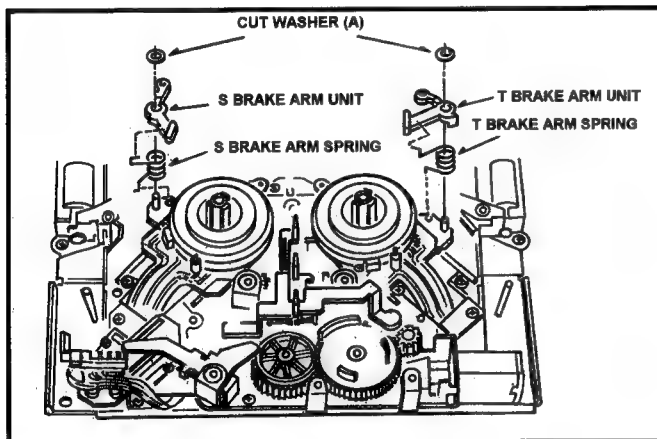


Fig.6-4-1 Removal of S & T Break Arm Unit

6-5. Supply Brake Solenoid Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the Bottom Panel.
4. Disconnect the connector P15 on the Mech I/F P.C.Board as shown in Figure 6-3-1.
5. Unscrew the 2 screws (A) and remove the Supply Brake Solenoid Base Unit as shown in Figure 6-5-1.
6. Unscrew the 2 screws (B) and remove the supply Brake Solenoid from Supply Brake Solenoid Base Unit as shown in Figure 6-10-1.

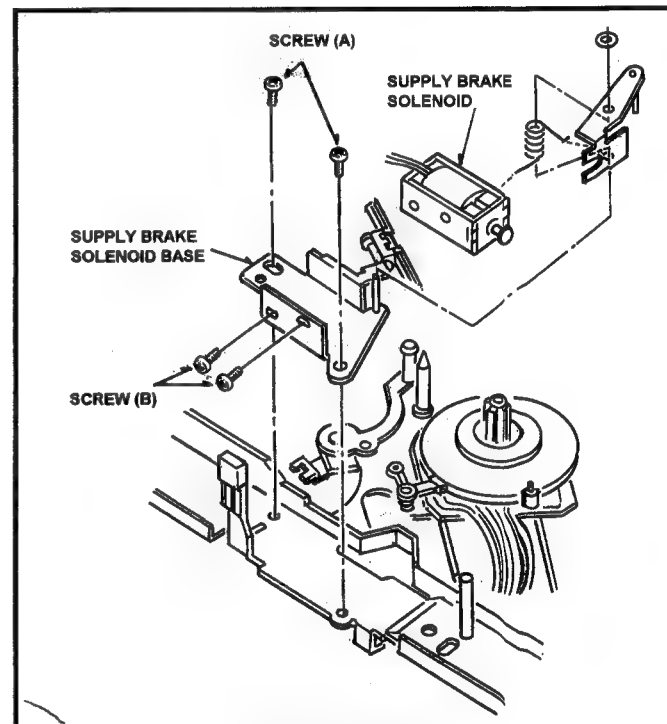


Fig. 6-5-1 Removal of Supply Brake Solenoid

(Installation)

1. Install the new supply Brake Solenoid follow the removal steps in reverse order.
- Note:** Hang on the Supply Brake Spring as shown in Figure 6-6-1.
2. Adjustment is required after installation.

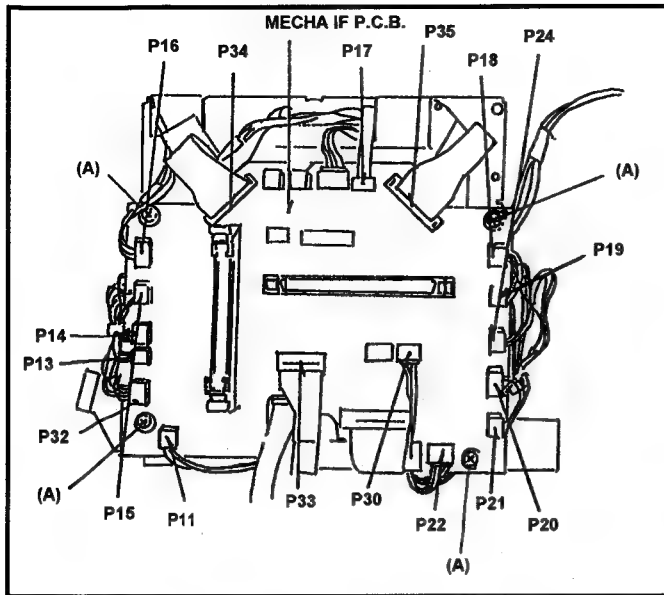


Fig. 6-3-1 Connection of S & T Reel Rotor Unit

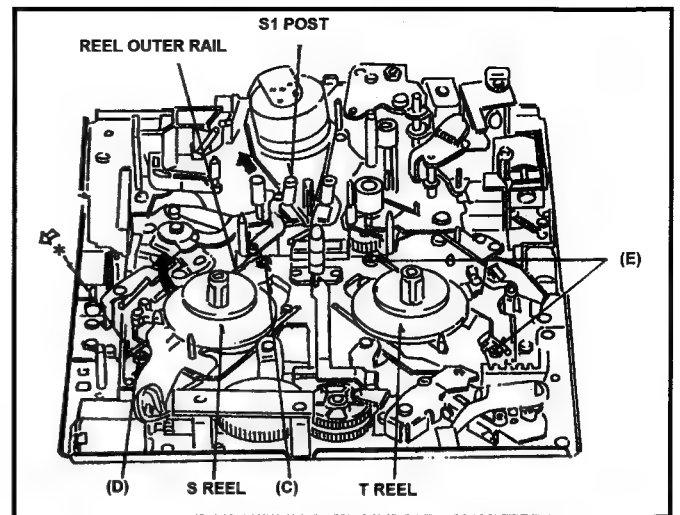


Fig.6-3-2 Removal of S & T Reel Rotor Unit

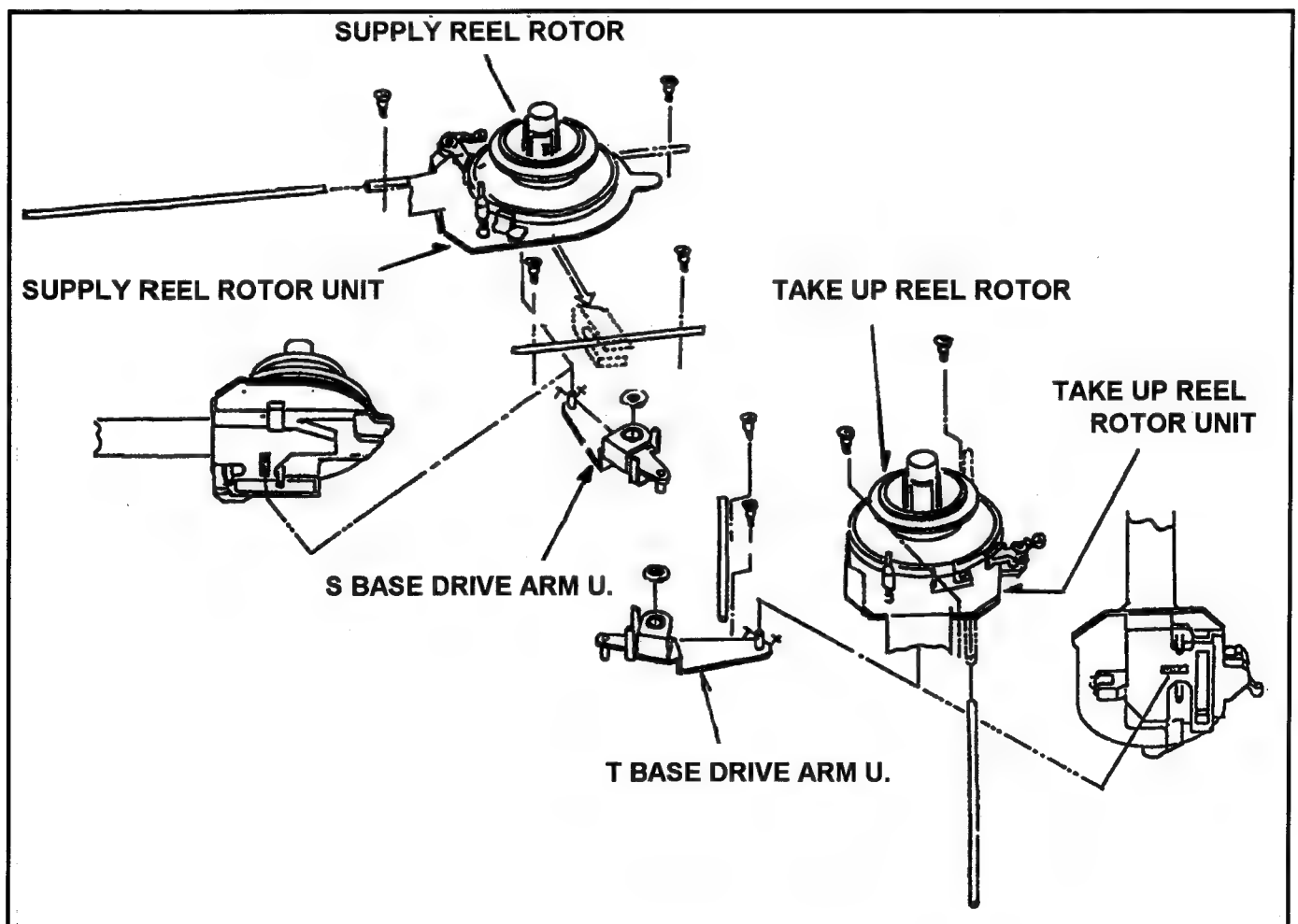


Fig.6-3-3 Installation of S & T Reel Rotor Unit

6-3. Supply Reel Rotor Unit and Take Up Reel Rotor Unit Replacement

(Removal)

1. Remove the Top Panel (Refer to item [2-1. Removal of Top Panel]).
2. Remove the Front Loading Unit (Refer to item [2-5. Removal of Front Loading Unit]).
3. Remove the Bottom Panel (Refer to item [2-2. Removal of Bottom Panel]).
4. Disconnect the connector P34 and P35 on the Mech I/F P.C.Board as shown in Figure 6-3-1.
5. Move the S1 post to loading direction by manual ejecting method until the screw (C) can removing position.
6. Confirm the supply and Take Up Brake are not release.
7. Press the iron core of M stopper solenoid to release the M stopper.
8. Remove the 4 screws (C), (D) and (E) as shown in Figure 6-3-2.
9. Remove the Supply and Take Up Reel Rotor Unit and Reel Outer Rail.

Note: Memorized the groove position of Reel Base, which inserted the pin of Drive Arm Unit.

(Installation)

1. Through in the Reel Outer Rail to New Supply and Take Up Reel Rotor Unit.
2. Hang on the Reel Rotor Unit to Reel Inner Rail and Install the Reel Rotor Unit then the pin of Drive Arm Unit should be matched with groove position of Reel Base as shown in Figure 6-3-3.
3. Install the 4 screws (C), (D) and (E).
4. Confirm that the Reel Rotor Unit moving smoothly on the Rail by hand.
5. Move the Reel Rotor Unit to front side by hand and then pull up the iron core of M stopper solenoid for operating M stopper.
6. Set the unloading condition by turn the Emergency shaft counter-clockwise.
7. Connect the Flexible Cable to Connector P34 and P35 on the Mech I/F P.C.Board.
8. Adjust the Motor Torque Offset value (Refer to item 4-1 of section 4).
9. Confirm that the Tension value on playback mode (Refer to item 5-11).

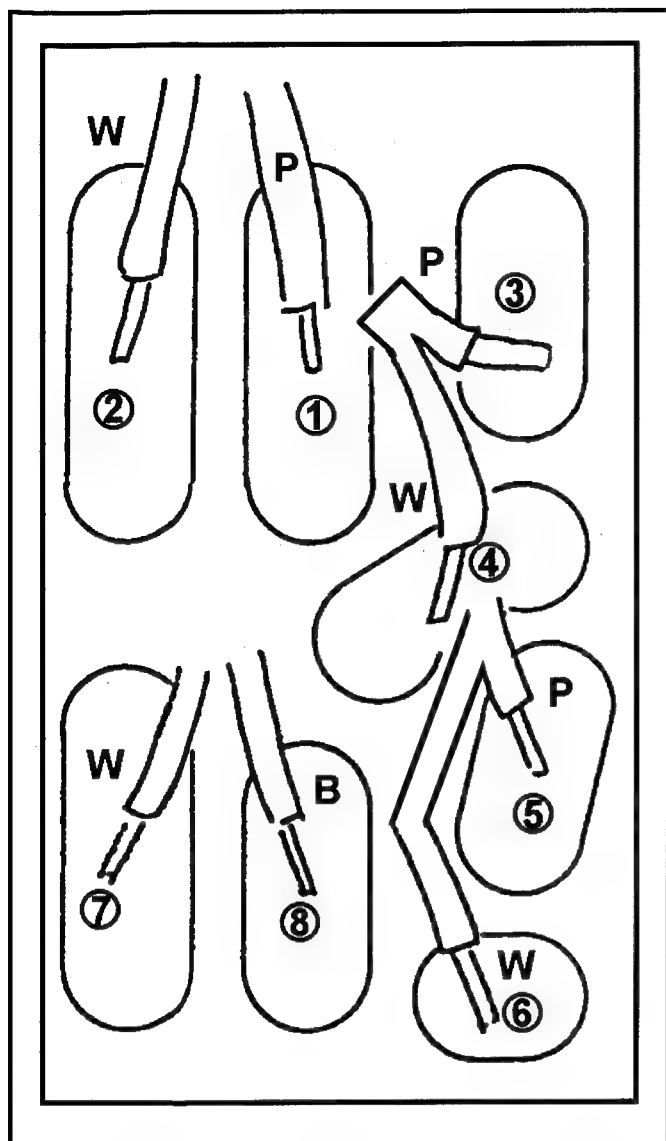


Fig. 6-2-3

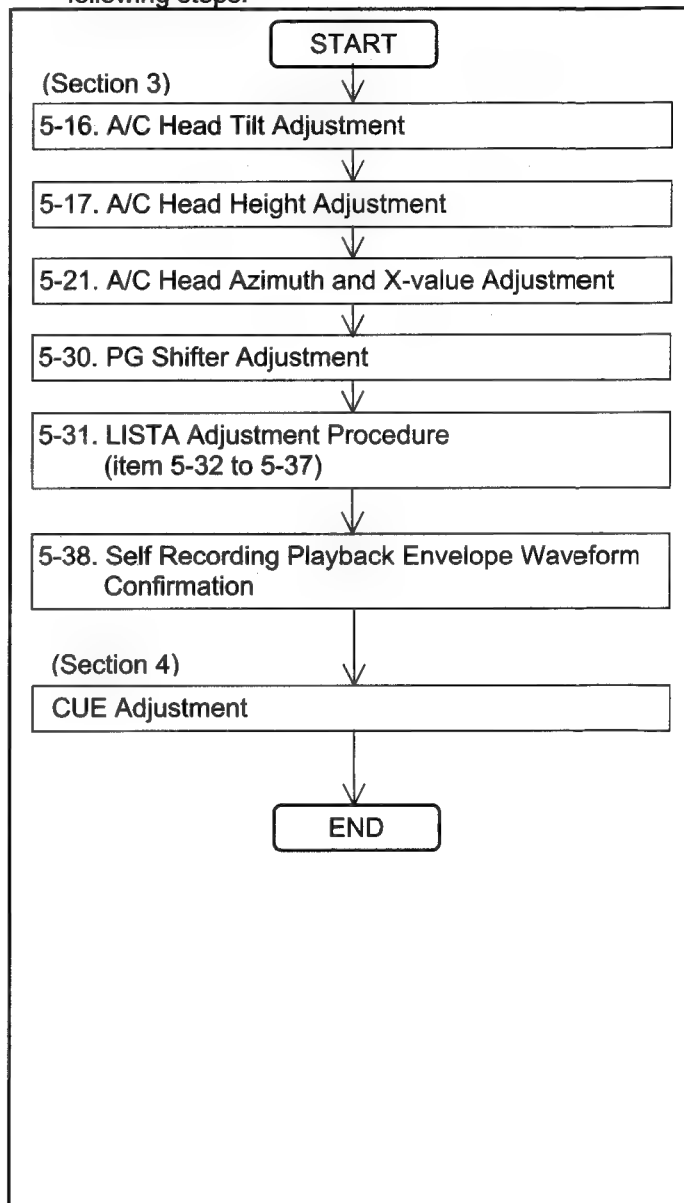
A/C Head Side	Cable Color		Connector No.
1	PINK	YELLOW	P1
2	WHITE		
3	PINK	RED	
4	WHITE		
5	PINK	GREEN	P30
6	WHITE		
7	WHITE	YELLOW	
8	BLACK		

6-2-2. Adjustment Flowchart After A/C Head Replacement

- After installing, Mechanical and Electrical Adjustments should be performed.

NOTE: The hex screw (B) is kept loose until the A/C Head Height Adjustment is completed.

- After replacing the A/C Head, perform the following steps.



6-2. A/C Head Replacement

6-2-1. Replacement

※ Required tools:

Nut Driver (5.5m/m)(VFK1150)

Hex Driver (VFK1148)

Hex Wrench (VFK1190)

(Removal)

1. Remove the Top Plate.
2. Loosen the hex. screw (B) and remove the Nut (C). Pick up the Head Height Adjustment Spring and then remove the A/C Head Unit as shown in Figure

Point: Memorize the height of Nut (C) before removing the Nut (C),

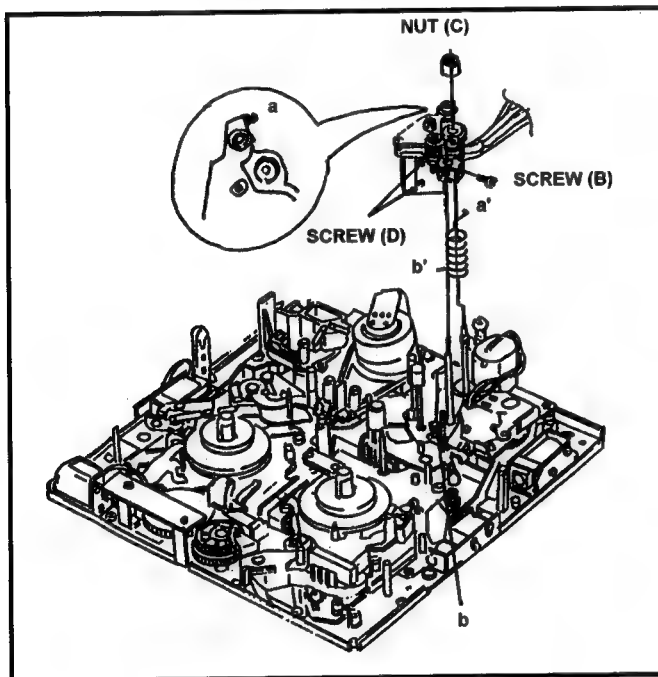


Fig. 6-2-1

3. Remove the 2 screws (A). and disconnect the 2 connectors P1 on the A/C Head I/F P.C.Board and P30 on the Mech I/F P.C.Board, and then remove the A/C Head from the A/C Head Plate.
4. Remove 2 screws (D) to remove the Shield Cover as shown in Figure 6-2-1.
5. Unsolder the lead wires as shown in Figure 6-2-3.

Note: When unsolder the lead wires, do not unsolder all at the same time.)

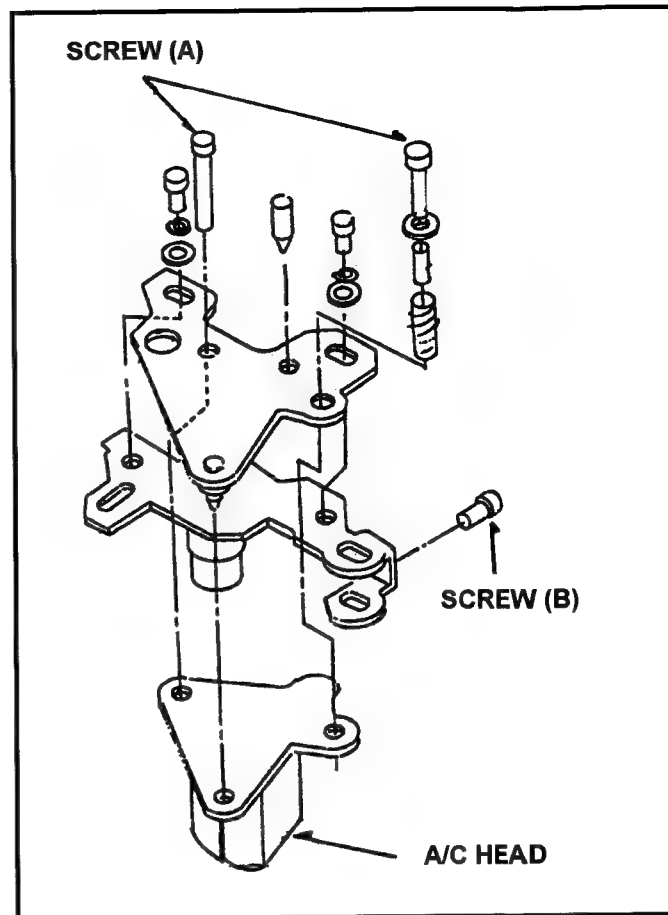


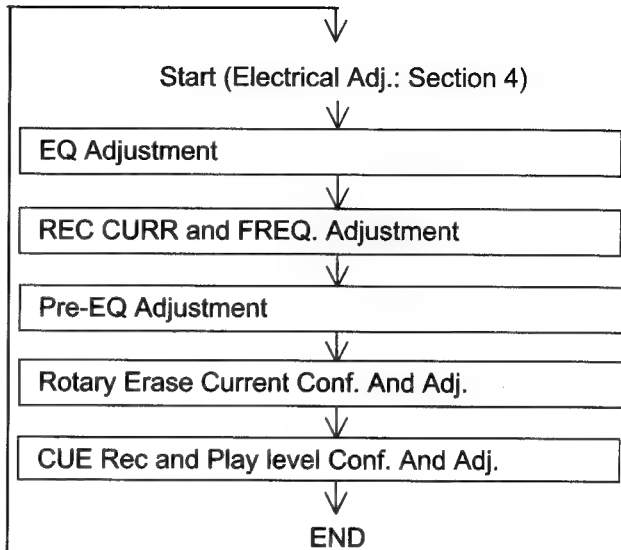
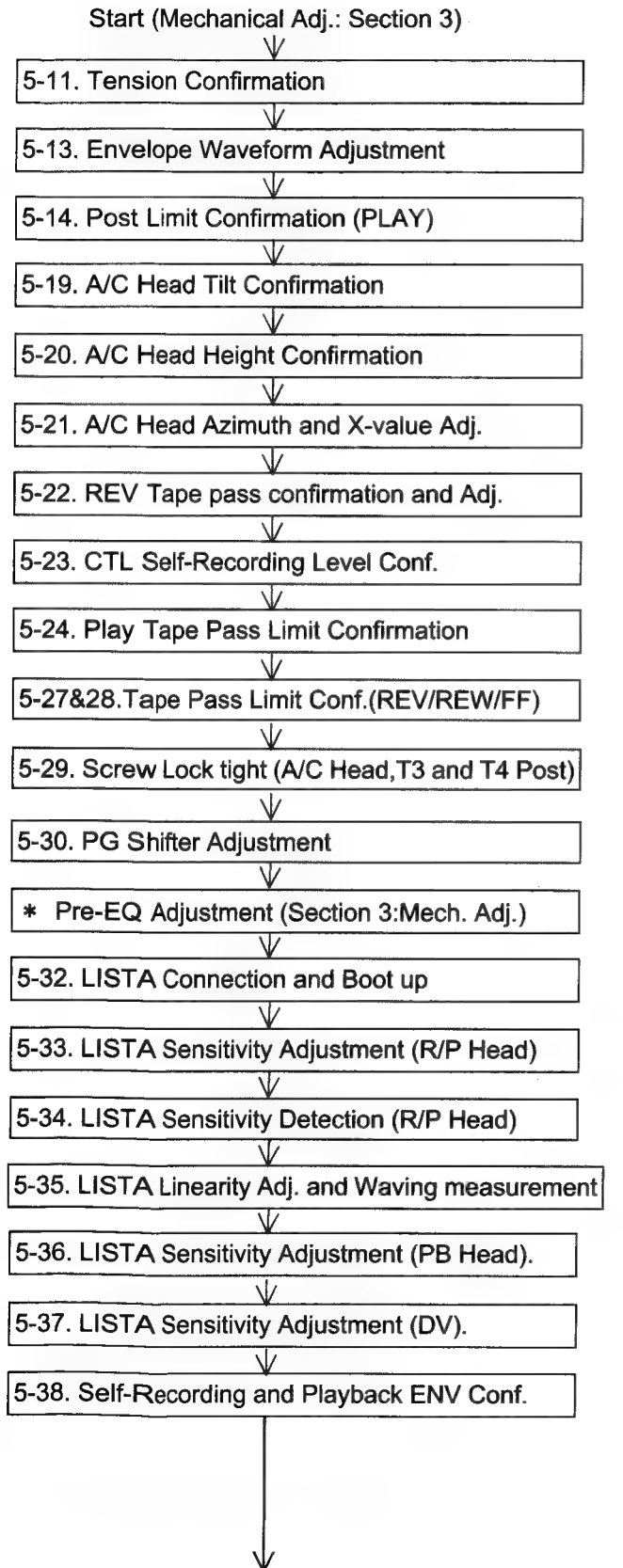
Fig. 6-2-2

(Installation)

1. Remove the Shield Case from the New A/C Head and solder the lead wires to New A/C Head (Refer to Figure 6-2-3).
2. Re-install the shield case to A/C Head.
3. Install the A/C Head to A/C Head Plate and tighten 2 screws (A) so that A/C Head is parallel to A/C Head Plate.
4. Install the A/C Head Unit.
5. Put on the Head Height Adjustment Spring and tighten the Nut (C).
6. Clean the surface of the A/C Head.
7. Perform the A/C Head adjustment.

6-1-4. Adjustment Flow Chart after Cylinder Unit Replacement

1. Adjust following items after Cylinder Unit replacement.



NOTE: EQ, REC CURR and REC FREQ adjustment can be executed Automatically by use AUTO software and Tool.

NOTE: For the PG Shifter Adjustment, release hand from the search button after changing the PG Shifter value at right of "PG SHIFT" on the monitor. If the value is not changed for a long time, tape error or ITI envelope lack may be occurred.

6-1-2. Cleaning Arm Unit Replacement

(Removal)

1. Unscrew the 2 screws (A) to remove the T1 Guide as shown in Figure 6-1-5.
2. Pick up the tip portion (B) of Cleaning Arm Unit and remove the spring from Cleaner Arm Unit. Then remove the Cleaning Arm Unit as shown in Figure 6-1-5.

(Installation)

1. Install the cleaning Arm Unit, then hang the spring on Cleaning Arm Unit.
2. Install the T1 Guide and tighten 2 screws (A).
3. Press the iron core of the Cleaner Solenoid and confirm that the Cleaner Roller is rotated when the cylinder is rotated.
4. T1 Guide position adjustment should be performed.

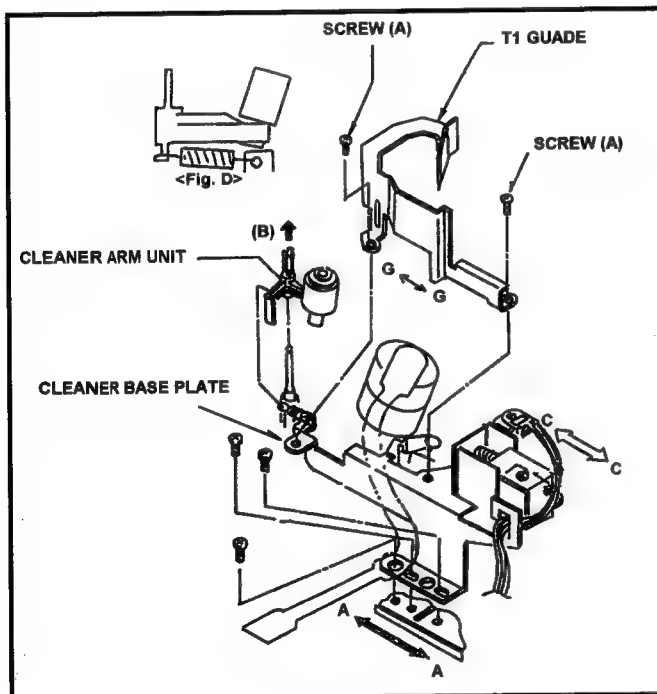


Fig. 6-1-5

6-1-3. T1 Guide Position Adjustment

Place the unit in Loading completion mode without tape.

< How to Make the No Tape Loading >

- Open the "SERVO ADJUST" menu in the Service menu.
- "Select the item " T TORQUE " and press the Search button for making the loading condition. And turn power to off.

1. Observe the clearance (B) between T1 Guide and T1 post as shown in Figure 6-1-6. And make sure that it is within 0.2 to 0.5mm.
2. If not, loosen the 2 screws (A) and adjust the position of T1 Guide by moving to arrow direction (G ⇌ G) so that the clearance (B) is within specification. And tighten the 2 screws (A).

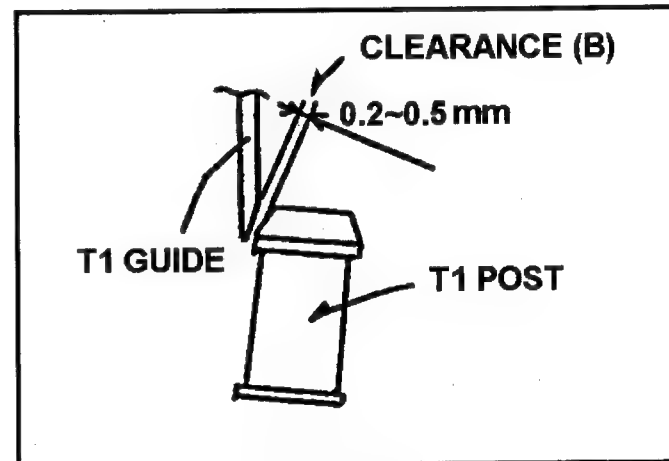


Fig. 6-1-6

6. Mechanical Parts Replacement and Adjustment Procedures

GENERAL

When mechanical parts are replaced, pay attention to the following notes.

1. Turn power off before replacing any part.
2. If any adjustment is required after replacing parts, perform the required adjustments.
3. Use proper fixture tools.
4. Make sure to clean the parts after replacement, Also when the mechanical parts are replaced, follow the replacement procedure.

6-1. Cylinder Unit Replacement

(Removal)

1. Remove the T1 Guide and Cleaning Arm Unit (Refer to item 11-8).
2. Disconnect the connector P5002 and P5003 on the Head Buffer board. And remove the screw, which is fixed with flexible cable.

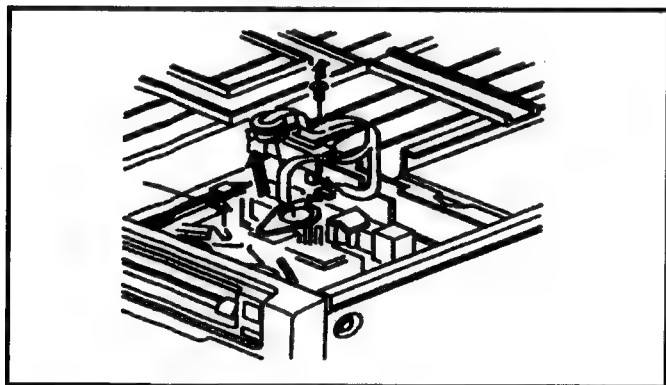


Fig. 6-1-1

Note: Be careful when removing the flexible cable from the connector. Refer to the way to remove the connector as shown in Figure 6-1-2.

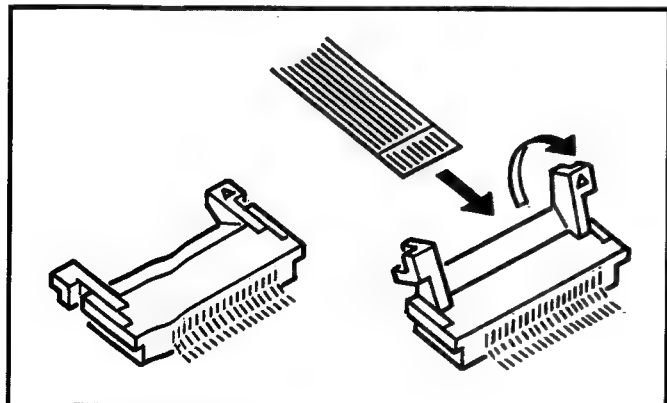


Fig. 6-1-2

3. Disconnect the connector P33 on Mech I/F P.C.Board at bottom of VTR. Then remove 3 screws (with spring) from the Cylinder unit, and remove the Cylinder unit without touching any mechanical part.

Note: Do not touch the cylinder surface by finger directly.

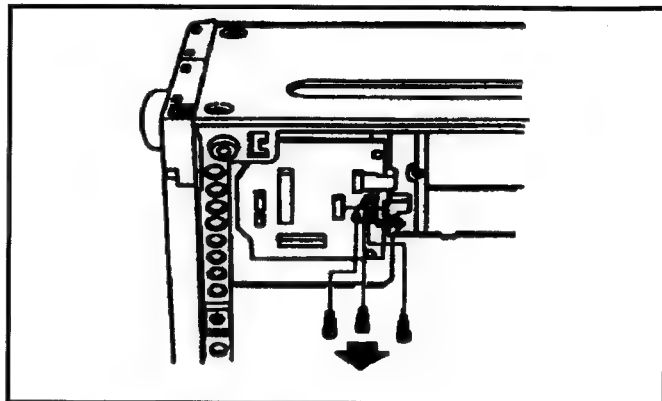


Fig. 6-1-3

(Installation)

1. Install a Cylinder unit as reverse order of its removal.

Note: Set the Mechanical Chassis pins are matched with the specified cylinder holes on the bottom of the cylinder.

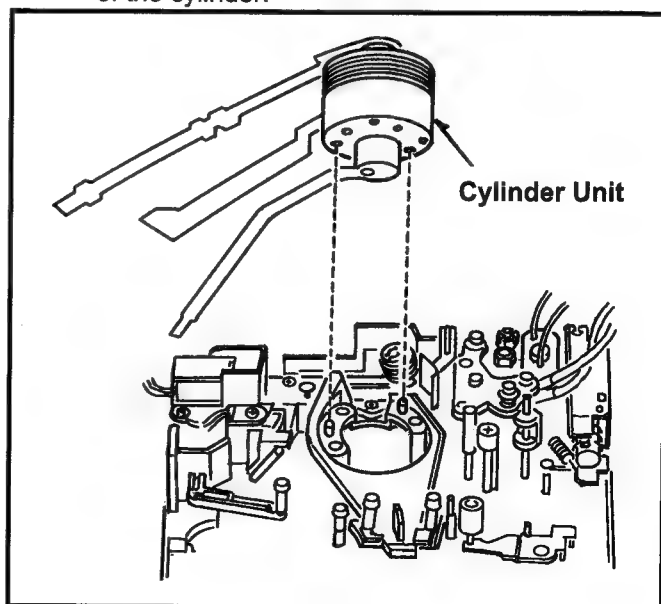


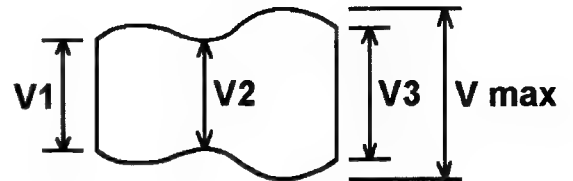
Fig. 6-1-4

2. After installing T1 Guide, T1 Guide position adjustment is necessary (Refer to adjustment procedure of item 6-1-3).

5-38. Self-Recording Playback Envelope Waveform Confirmation

SPEC	$V1/V_{max}, V2/V_{max}, V3/V_{max} \geq 0.8$
TEST POINT	TP16:R/P ENV (RF Board:H4) TP1 :TRIG/RP HSW (RF Board:H4)
ADJUSTMENT	S1 and T1 Post Height
MODE	PLAY
TAPE	Blank Tape
M.EQ	Oscilloscope
TOOL	VFK1149(Post Driver)

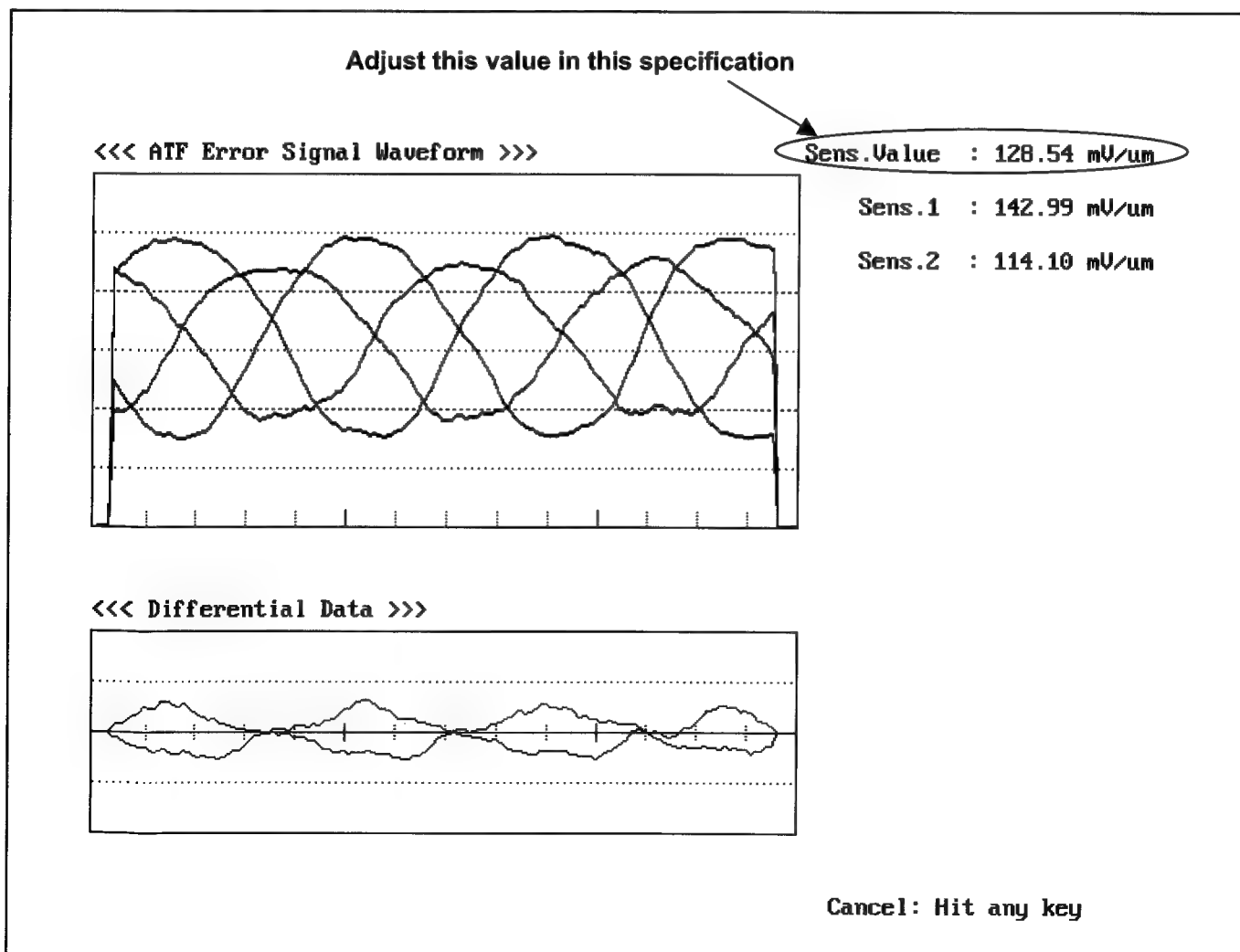
1. Record the color bar signal.
2. Play back the recorded portion and confirm that the envelope output is within specification
3. If out of specification, perform the Envelope Waveform and LISTA adjustment again.



5-37. LISTA Sensitivity Adjustment (DV Compatibility)

SPEC.	Sensitivity: 130 ± 30 (mV/um)
MODE	PLAY
TEST POINT	TP321 ATF ERR (SERVO Board:F1) TP233 PB HSW (SERVO Board:F1) TG510 GND (SERVO Board:F1)
ADJUSTMENT	A08:RP GAIN
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)

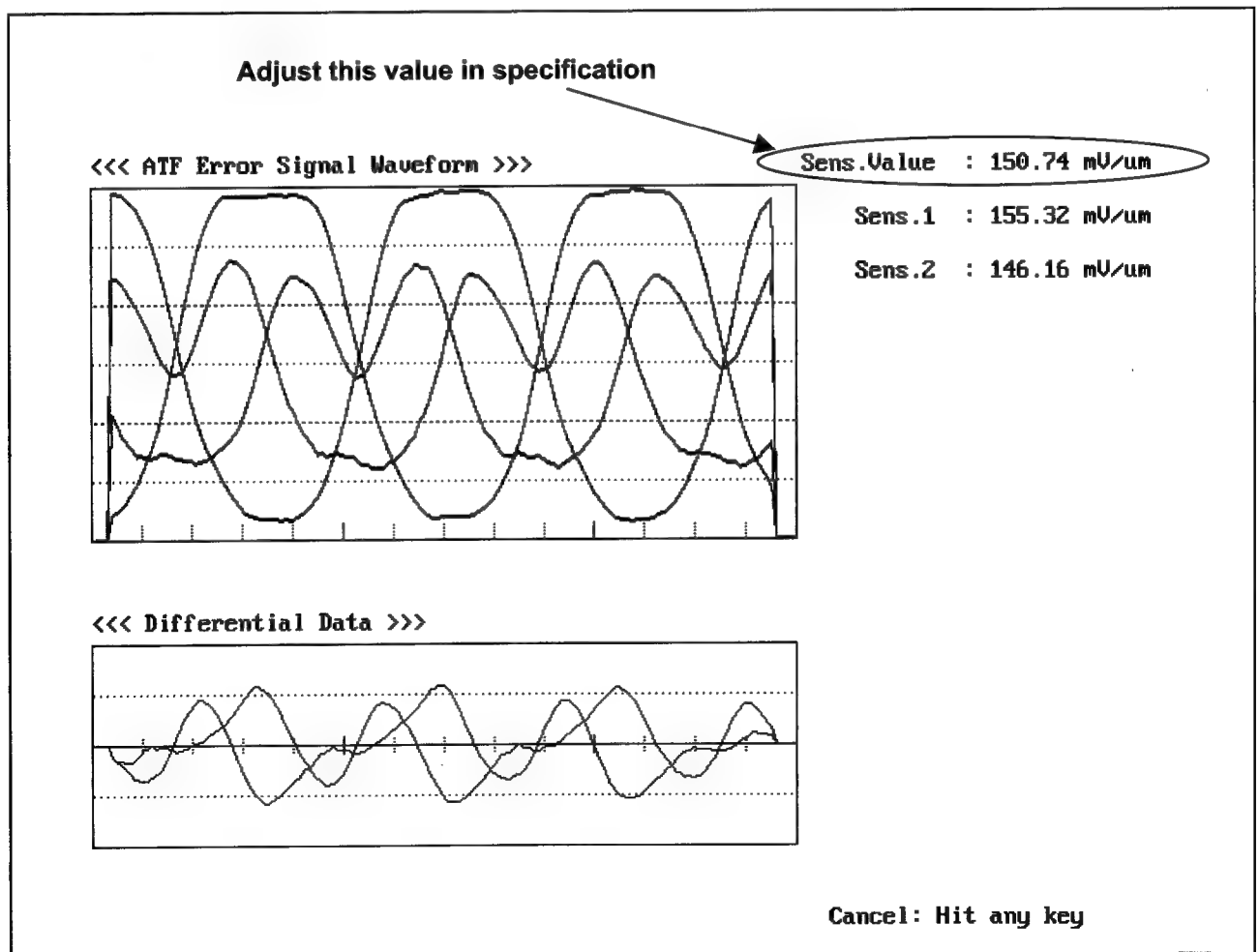
1. Connect the Test Point to clip of LISTA cable for ATF Error signal measurement.
2. Open the SERVO ADJUST menu on Service menu and select the EVR " A08:R/P GAIN ".
3. Playback the LISTA alignment tape.
4. Select the "<6> ATF Error Signal Monitor" on the LISTA main menu and after appear the message " 1.2% Speed... ", press ENTER key, then sensitivity value as real time and waveform appear on the screen as shown as figure below.
5. Adjust EVR " A08 R/P GAIN " so that the sensitivity value is within specification.
6. After finish this adjustment, press ESC key to exit to the main menu.



5-36. LISTA Sensitivity Adjustment (PB HEAD)

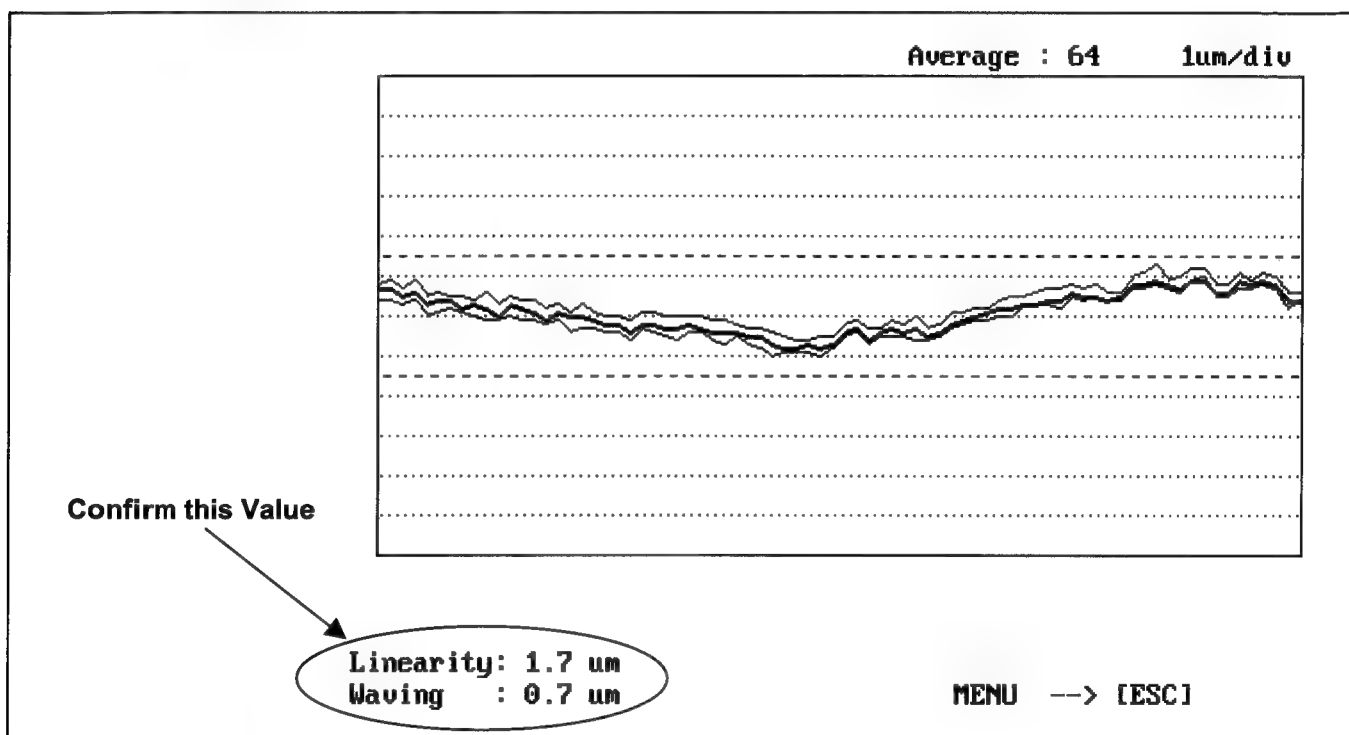
SPEC.	Sensitivity: 150 ± 15 (mV/ μ m)
MODE	PLAY
TEST POINT	TP321 ATF ERR (SERVO Board:F1) TP232 PB HSW (SERVO Board:F1) TG510 GND (SERVO Board:F1)
ADJUSTMENT	A04:PB GAIN P
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)

1. Connect the Test Point to clip of LISTA cable for ATF Error signal measurement.
2. Open the SERVO ADJUST menu on Service menu and select the EVR "A04:PB GAIN P".
3. Playback the LISTA alignment tape.
4. Select the "<6> ATF Error Signal Monitor" on the LISTA main menu and after appear the message "1.2% Speed..." , press ENTER key, then sensitivity value as real time and waveform appear on the screen as shown as figure below.
5. Adjust EVR "A04 PB GAIN P" so that the sensitivity value is within specification.
6. After finish this adjustment, press ESC key to exit to the main menu.



* [Waving Measurement]

1. Press "SPACE " key for make the Peak Hold during 30 seconds, when linearity is displayed.
2. After finish the Peak Hold, press "SHIFT" and "}" ,key simultaneously on the Key Board, then display the numerical values of 「Linearity」 and 「Waving」 on left lower portion of screen. And confirm the numerical values are in the specification. Also confirm the range of waving waveform is same quantity from entrance side to exit side. If the 「Linearity」 and 「Waving」 are out of specification and it caused by not enough limit of entrance or exit side of envelope, then adjust height of S1 and T1 post.
3. After this measurement is finished, press ESC key for return to main menu.



* NOTE: Saving of LISTA Data

The LISTA software can be saved linearity waveform and measurement value of linearity and waving as one file data to PC.

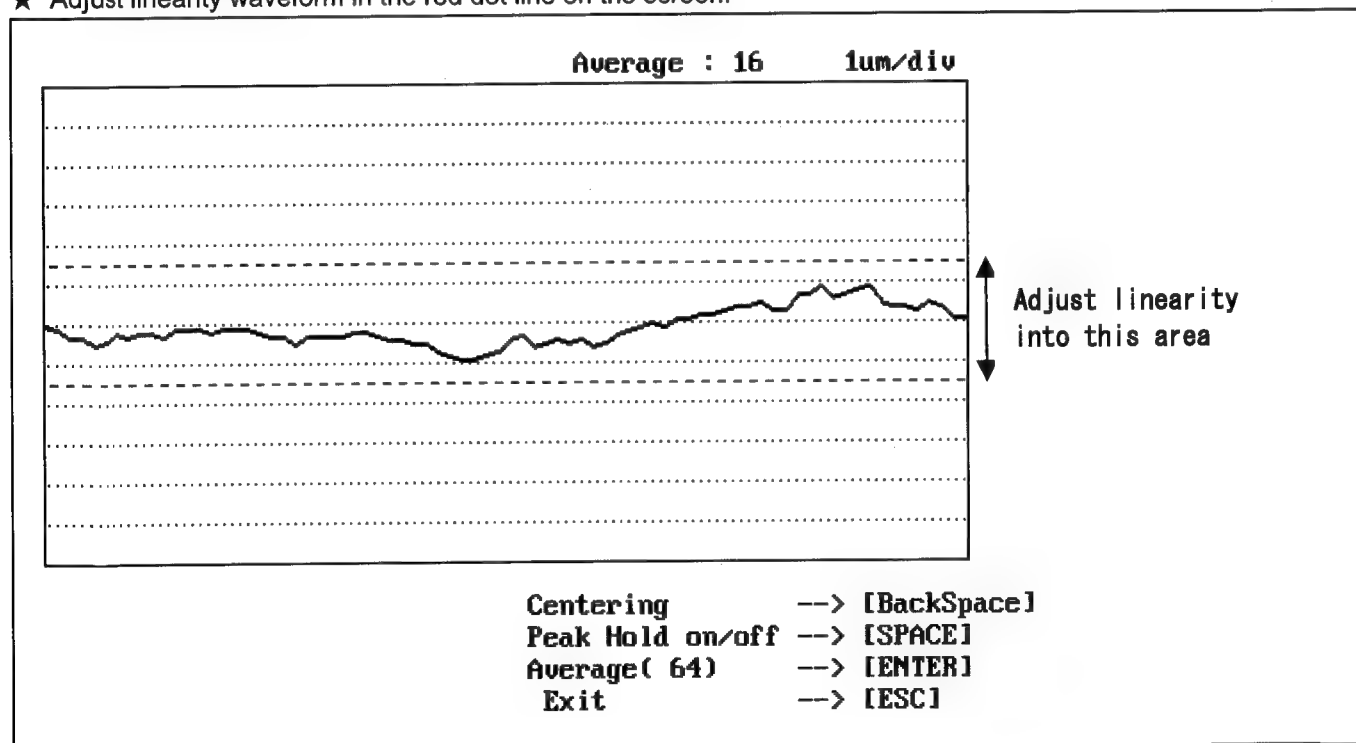
1. Basically this operation should be performed after linearity and waving measurement finished.
2. Select the item 「(3) Data Save/Load 」 on the LISTA main menu. And after open the menu select the item 「<1> Save」.
3. The linearity waveform as Peak Hold displayed on the screen. And after appeared message "File Name? " on the screen, entry the File Name and Comment. File Name must be in 8 characters, and comment is must be in 20 characters. As comment, entry the Serial Number, VTR Model Number and Head Rotation Hours etc, for use management of linearity data of each VTR.
4. After completion of saving, select the item 「<2> Load」 on the 「(3) Data Save/Load」 menu, then appear the saved File Name on the screen. And select it previous saved file for confirm the waveform and numerical value displayed correctly. By press "SHIFT" and "}" ,key simultaneously on the Key Board., then display the numerical values of 「Linearity」 and 「Waving」 on left lower portion of screen.

5-35. LISTA Linearity Adjustment and Waving Measurement.

SPEC	Linearity: Less than 3um, Waving: Less than 1.5um
MODE	PLAY (EVR is select to " A07: RP LINEAR P ")
TEST POINT	TP321 ATF ERR (SERVO Board:F1) TP233 R/P HSW (SERVO Board:F1) TG510 GND (SERVO Board:F1)
ADJUSTMENT	S1 and T1 Post Height
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)

1. Open the SERVO ADJUST menu on Service menu and select the EVR " A07: RP LINEAR P "
2. Playback the LISTA alignment tape.
3. Select the item " (2) Linearity Measurement " on the LISTA main menu and display the linearity waveform.
4. When the waveform as shown as below figure is displayed on the screen, press the " BS (back space) " key for display the waveform to center of scale on the screen. And adjust height of S1 and T1 post by Post Driver so that the linearity waveform is become flat as possible, and it should be in the specification.

★ Adjust linearity waveform in the red dot line on the screen.



★ POINT:

The part of left side of waveform(entrance side) is adjusted by height of S1 post and part of right side of waveform(exit side) is adjusted by height of T1 post.

Lower part of above waveform of figure is displayed lead on Cylinder.

When the post driver is remove from upper part of post, linearity waveform is changed.

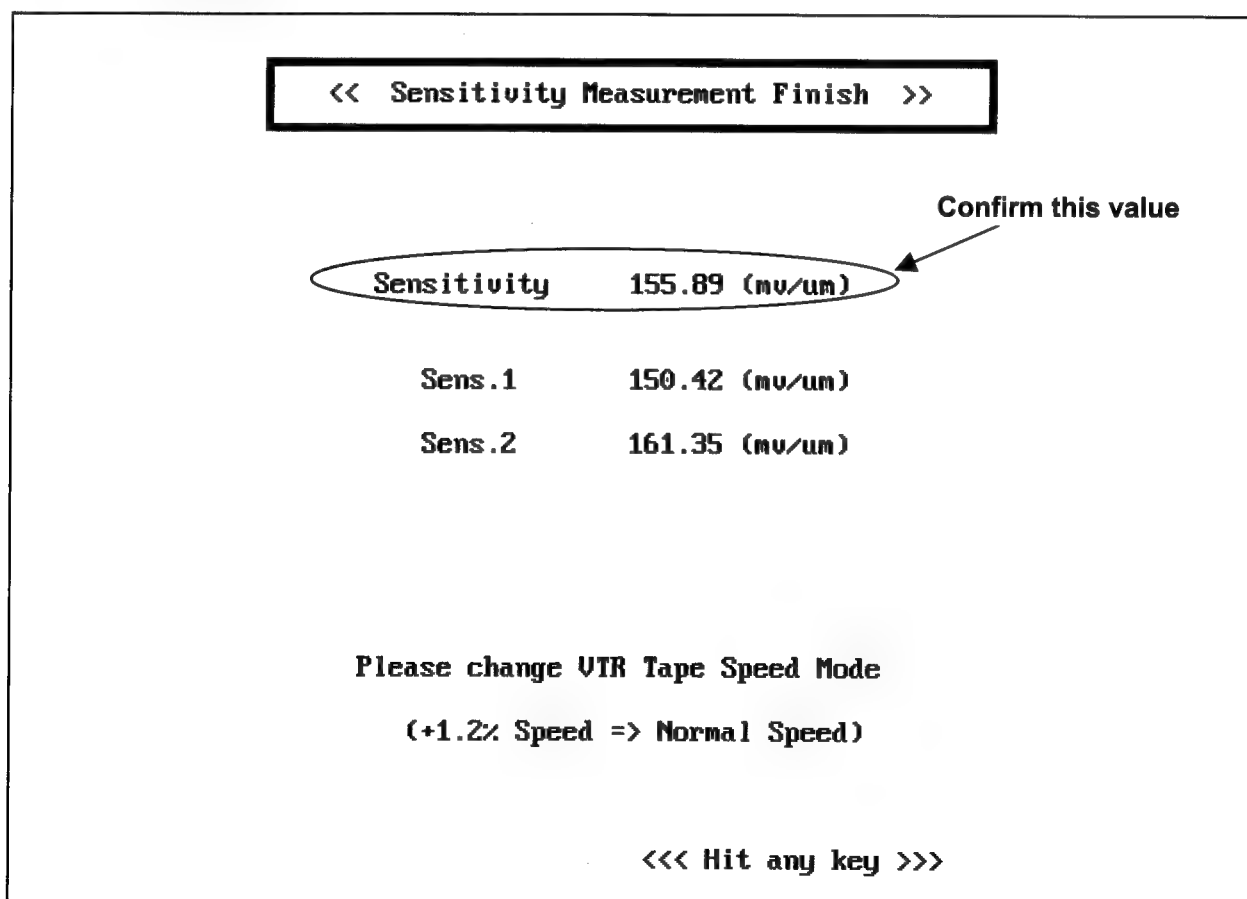
After finish this adjustment, eject the tape and insert the tape again for confirm the shape of linearity waveform does not changed.

5. After finish the linearity adjustment, measure the numerical value of linearity and waving.

5-34. LISTA Sensitivity Detection (RP Head)

SPEC	Sensitivity:150±15 (mV/um)
MODE	PLAY
TEST POINT	TP321 ATF ERR (SERVO P. C. Board:F1) TP233 R/P HSW (SERVO P. C. Board:F1) TG510 GND (SERVO P. C. Board:F1)
ADJUSTMENT	-----
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)

1. Open the SERVO ADJUST menu on Service menu and select the EVR " A06:RP GAIN P ".
2. Playback the LISTA alignment tape.
3. Select the " <1>Sensitivity Measurement" on the LISTA main menu and after appear the message " 1.2% that Speed... ", press ENTER key, then LISTA software start measurement of sensitivity value.
4. Confirm the sensitivity value is within specification, when the message << Sensitivity Measurement Finish>> and 「Sensitivity = numerical value」 are displayed on the screen.
5. If out of specification, repeat the steps 3 and 4.
6. If still out of specification, perform the "LISTA Sensitivity Adjustment again.

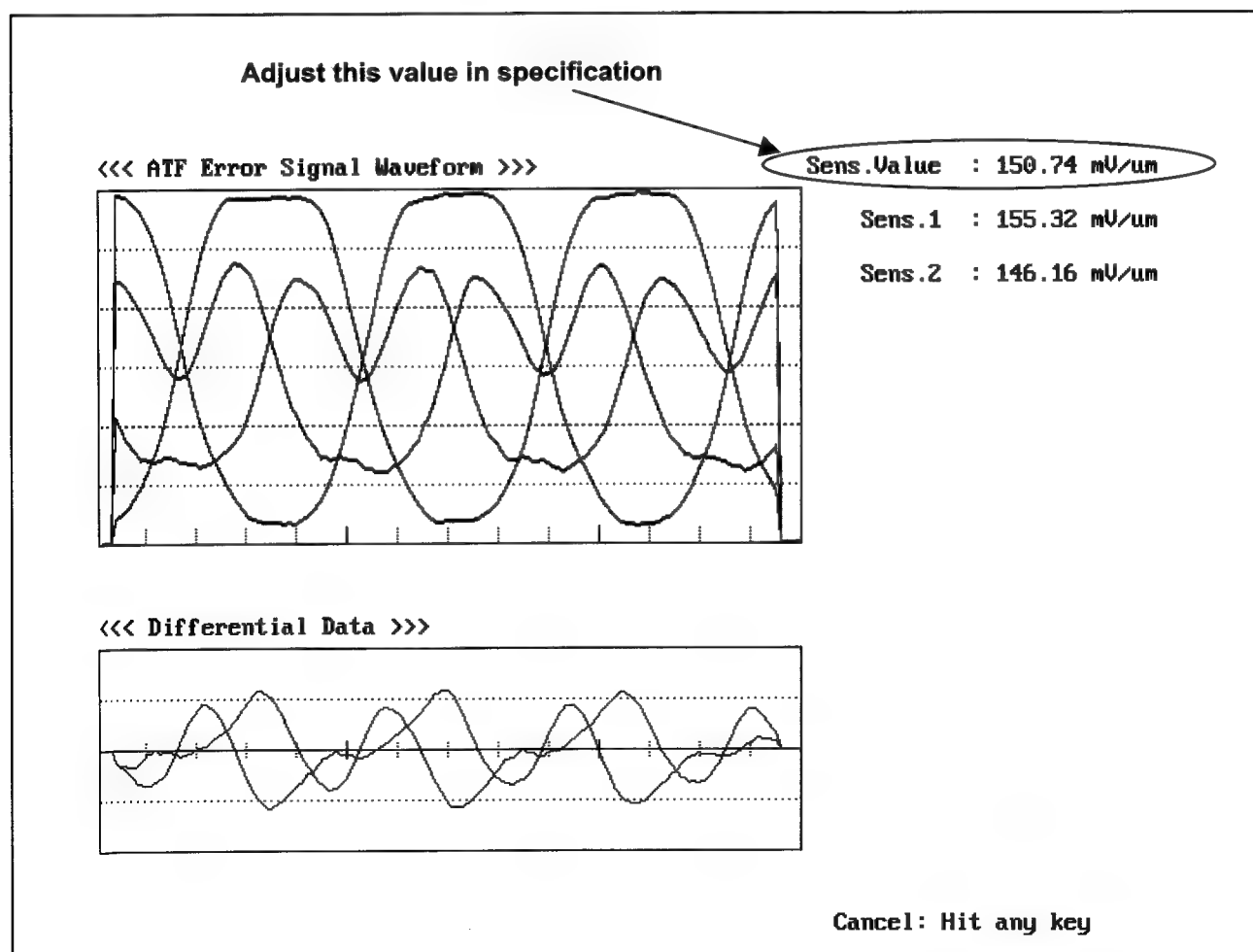


5-33. LISTA Sensitivity Adjustment (R/P Head)

SPEC.	Sensitivity: 150 ± 15 (mV/ μ m)
MODE	PLAY
TEST POINT	TP321 ATF ERR (SERVO Board:F1) TP233 R/P HSW (SERVO Board:F1) TG510 GND (SERVO Board:F1)
ADJUSTMENT	A06:RP GAIN P (SERVO ADJUST)
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)

Note: Before perform the Sensitivity adjustment, perform the PRE-EQ adjustment for adjust ENV Level (L/R) on RF AMP (H4) Board.(Refer to Sec. 4 :electrical adjustment).

1. Connect the Test Point to clip of LISTA cable for ATF Error signal measurement.
2. Open the SERVO ADJUST menu on Service menu and select the EVR "A06:RP GAIN P".
3. Playback the LISTA alignment tape.
4. Select the "<6> ATF Error Signal Monitor" on the LISTA main menu and after appear the message " 1.2% Speed... ", press ENTER key, then sensitivity value as real time and waveform appear on the screen as shown as figure below.
5. Adjust EVR " RP GAIN P " so that the sensitivity value is within specification.
6. After finish this adjustment, press ESC key to exit to the main menu.



< How to Entry the Attachment Data of Alignment Tape >

1. Select the item “ <4> Alignment Tape ” on the main menu of the LISTA software.
2. Select the item “ <2> ENTRY ” on the alignment tape menu.
3. After display the screen of “ << Alignment tape Data Entry >> ”, first input the Serial number follow the printed number on the tape label. And input the number “0” or “1” for select the PAL/NTSC. And after that for entry the tape type, in case of DVCPRO input to “0” , in case of DV input to “1”.
4. After select the Tape type, the frame for input the DATA and CHECK SUM appeared on the screen. Input the numerical value in numerical order on the data sheet, which are enclosed with alignment tape. If input the wrong number, appear the error message on the screen, then confirm that the data on the sheet.
5. After entry the data, select “ <1> SELECT ” on the Alignment Tape menu and select the serial number of the alignment tape.

<<Alignment Tape Data Entry>>

Serial No. 0596003 (NTSC)

18um

[1]	- 0.1
[2]	0.1
[3]	0.0
[4]	0.2
[5]	0.6
[6]	0.5
[7]	0.7
[8]	0.9
[9]	1.0
[10]	0.8

[11]	0.7
[12]	1.0
[13]	0.7
[14]	0.5
[15]	0.2
[16]	- 0.5
[17]	- 0.3
[18]	- 0.3
[19]	- 0.1
[20]	- 0.6

[21]	- 0.4
[22]	- 0.2
[23]	- 0.7
[24]	- 0.6
[25]	- 0.7
[26]	- 0.3
[27]	- 0.4
[28]	- 0.4
[29]	- 0.6
[30]	- 0.3

[31]	- 0.4
[32]	- 0.6
[33]	- 0.3
[34]	- 0.2
[35]	- 0.1
[36]	- 0.3
[37]	- 0.1

[CS]	- 0.6
------	-------

- After boot up LISTA software, select the item " DVCPRO " for format select on the menu.
- Select the item " AJ-D750 " for selected model on the menu (AJ-D440/450 is equivalent to AJ-D750).

Linearity monitor system of track
using ATF error signal for DVCPRO

-- L I S T A P R O --
[Service Use]

<<< FORMAT SELECT >>>

<1> DVCPRO

<2> DVCPRO 4X
<3> DVCPRO 50
<4> Quit

Move:Cursor key Select:[ENTER] key

Linearity monitor system of track
using ATF error signal for DVCPRO

-- L I S T A P R O --
[Service Use]
(for DVCPRO UTR)

<<< UTR SELECT >>>

<1> A J - D 7 5 0

<2> A J - D 7 0 0
<3> A J - D 2 0 0

Move:Cursor key Select:[ENTER] key

- Next select the Serial number of the alignment tape on the screen. In case of LISTA software have not resisted data of alignment tape, press the ESC key, then main menu is display on the screen. And select item " <4> Alignment Tape " for entry the data on the attachment sheet, which is enclosed of alignment tape.
- In case of LISTA software have resisted data of alignment tape, select the serial number of Alignment tape, then appear message "ok?(y/n)" on the screen. And press " Y " or " ENTER " key, then LISTA main menu is display on screen.

« In case of Alignment tape resisted »

<< Alignment Tape Select >> Last Select [4]

No.	Serial No.	PAL/NTSC	Check Sum	Type	Entry Date
[1]	0000	NTSC	0.0	18 um	10-05-1995
[2]	0000	PAL	0.0	18 um	02-20-1998
[3]	LRC-13	NTSC	0.0	18 um	06-01-1998
[4]	9804420	PAL	0.2	18 um	09-08-1998
[5]	Lrc-20	PAL	0.0	18 um	09-09-1998
[6]	9806488	NTSC	0.1	18 um	12-14-1998

<== ok? (y/n)

Move:Cursor key Select:[ENTER] key Cancel:[ESC] key

« In case of Alignment tape does not resisted »

<< Alignment Tape Select >> Last Select [4]

No.	Serial No.	PAL/NTSC	Check Sum	Type	Entry Date
[1]	0000	NTSC	0.0	18 um	10-05-1995
[2]	0000	PAL	0.0	18 um	02-20-1998

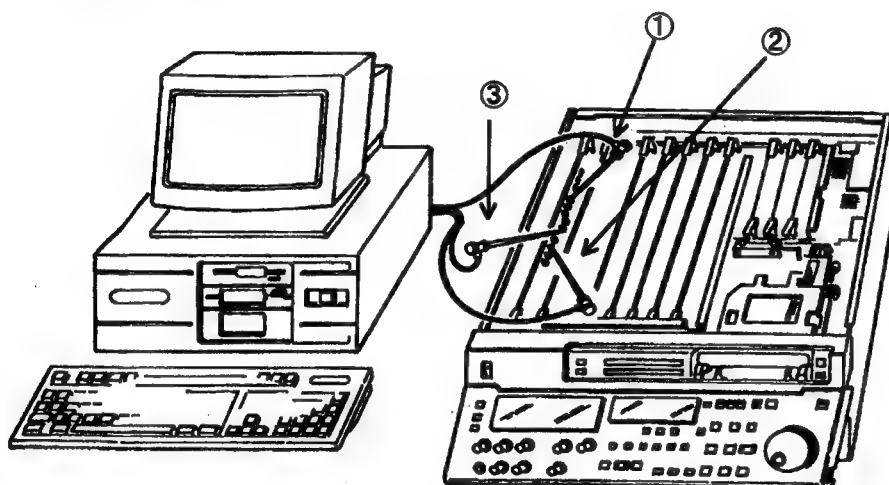
Move:Cursor key Select:[ENTER] key Cancel:[ESC] key

5-32. LISTA Connection and Boot Up

TEST POINT	TP321 ATF ERR (SERVO Board:F1) TP233 PB HSW (SERVO Board:F1) TP232 R/P HSW (SERVO Board:F1) TG510 GND (SERVO Board:F1)
M.EQ	P/C (AD Board should be installed), Oscilloscope
TAPE	NTSC: VFM3581KM (LISTA) PAL: VFM3681KM (LISTA)
TOOL	VFK1481(LISTA Software),VFK1186(LISTA Cable)

1. Connect the LISTA Cable to A/D board on PC.
2. Connect the Clips of LISTA Cable to test point on Servo Board as follow as below.
 - ①.ATF : TP321 (ATF error)
 - ②.HSW : TP233 (HSW:RP) or TP232 (HSW:PB)
 - ③.GND : TG510 (GND)

CONNECTION



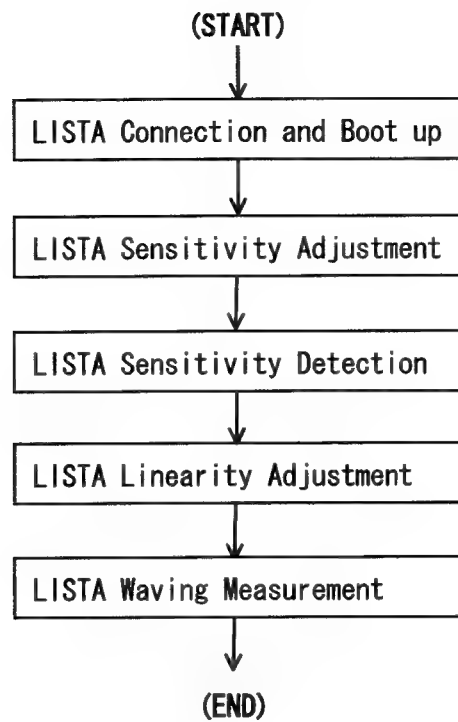
3. Boot up the LISTA software on DOS mode.

★ Install and Boot up.

All files on the floppy disk (VFK1481) copy to created directly on PC(i.e. C:¥LISTA).

Type "LISTA" and press ENTER Key, then boot up the LISTA software VFK1481

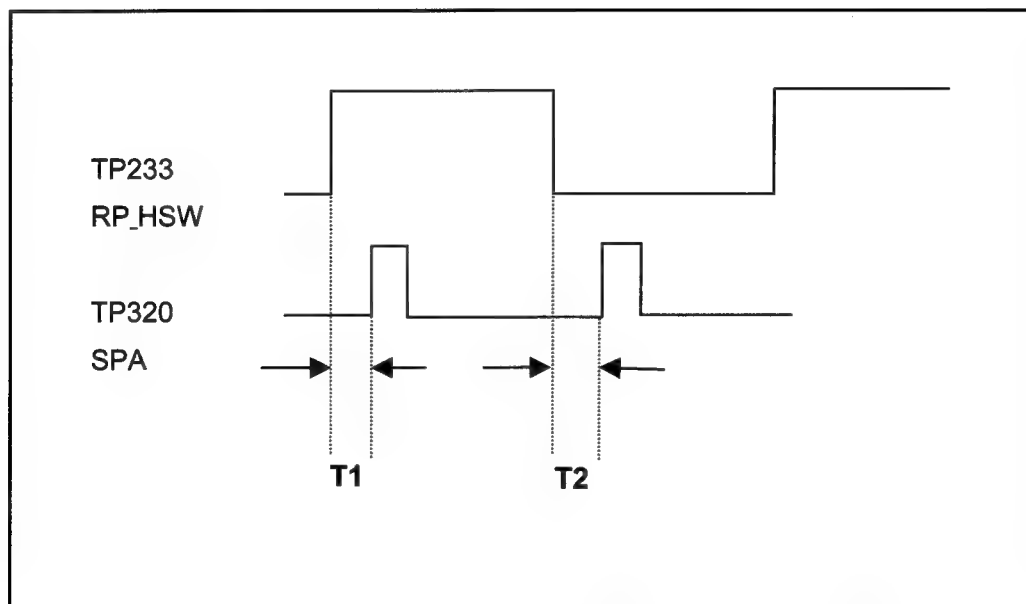
5-31. LISTA Adjustment Procedure.



5-30. PG SHIFTER Adjustment

SPEC.	T1, T2 = 126.4 μ sec \pm 2 μ sec.
MODE	PLAY
TEST POINT	TP320 SPA (SERVO Board:F1) TP233 R/P HSW (SERVO Board:F1)
ADJUSTMENT	A01:PG SHIFTER (EVR on SERVO ADJUST menu)
M.EQ	Oscilloscope
TAPE	NTSC: VFM3580KM PAL: VFM3680KM

1. Open the SERVO ADJUST menu on the Service menu and select the item " A01:T PG SHIFTER ".
2. Playback the Alignment tape.
3. Press the (◀) or (▶) button and keep it until the numerical value of "A01:PG SHIFTER" are renewed.
4. Connect the scope to TP233 and TP320. Trigger the scope by TP233. Then it is displayed as shown in figure.
5. Confirm that the period of T1 and T2 in specification (126.4 μ sec \pm 2 μ sec).

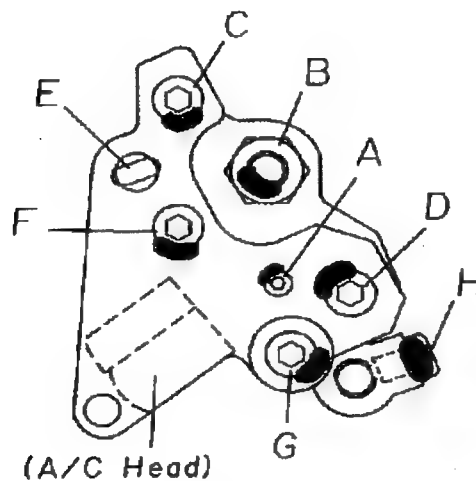


5-29. Screw Lock Tight of A/C Head and T3, T4 Post

[Screw Lock Tight of A/C Head]

	SCREW A	OTHER SCREW
Lock Tight Grew Quantity	1/3 of the screw	1/3 of the screw

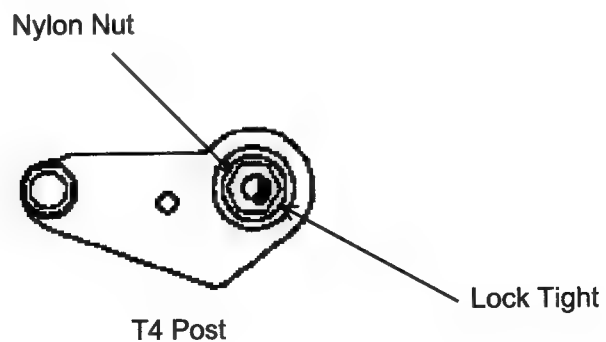
1. Fix the screw by the Lock Tight Grew after adjustment..
2. Before adjustment melt the Grew.



[Screw Lock Tight of T3 and T4 Post]

	T3 Post	T4 Post
Lock tight grew quantity	1/4 of the screw	1/4 of the screw

1. After adjustment, attach the lock tight grew at the Nylon nut..
2. Before adjustment, melt the Grew.

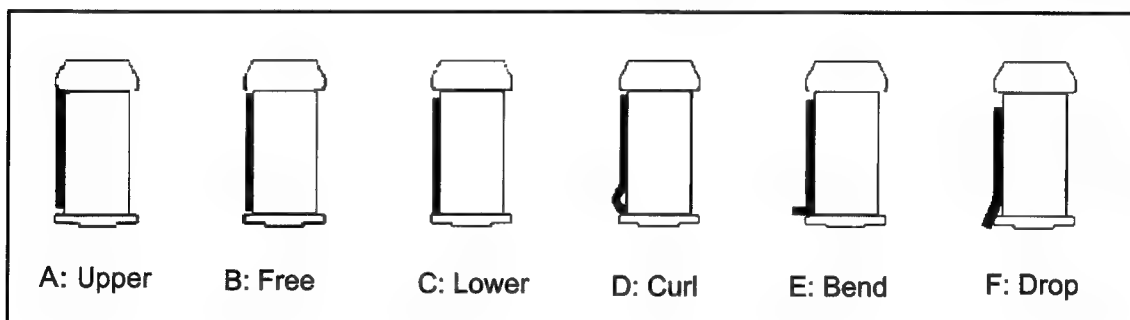


5-28. FF, REW Tape Pass Limit Confirmation

SPEC.	Each Post limit shown in table.
MODE	FF,REW
TAPE	M cassette (MP tape) tape. Tape beginning and end portion

Post Name	Tape Limit(Refer to figure)					
	A	B	C	D	E	F
S5 Post	O	O	O	X	X	X
S4(Tension) Post	X	O	O	X	X	X
S1 Post	O	X	X	X	X	X
T1 Post	O	O	O	X	X	X
T3 Post	O	O	O	X	X	X
T4 Post	O	O	O	X	X	X

- 1 Place unit into FF and REV mode and confirm the each post limits is within specification.
2. If out of specification, adjust the post height follow the each adjustment procedure (Refer to above table).

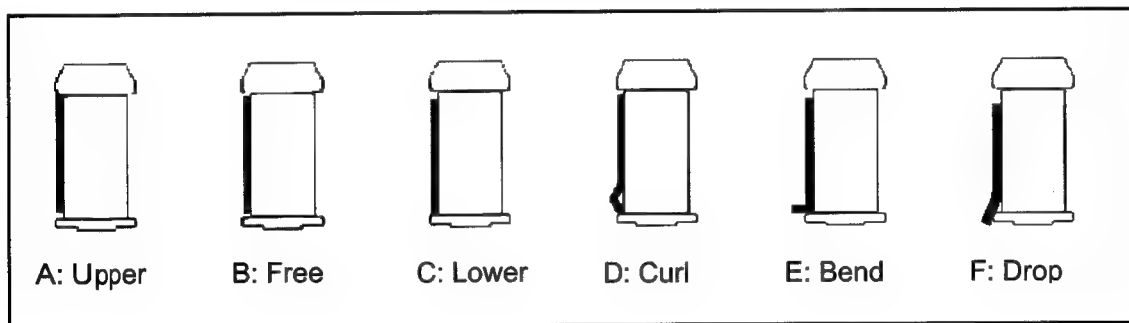


5-27. Tape Pass Limit Confirmation

SPEC	Each Post limit shown in table.
MODE	REV
TAPE	M cassette (MP tape) tape. Tape beginning and end portion

Post Name	Tape Limit(Refer to figure)					
	A	B	C	D	E	F
S5 Post	○	○	○	X	X	X
S4(Tension) Post	X	○	○	X	X	X
S1 Post	○	X	X	X	X	X
T1 Post	○	○	○	X	X	X
T3 Post	X	X	○	X	X	X
T4 Post	X	X	○	X	X	X

1. Place unit into REV mode and confirm the each post limits is within specification.
2. If out of specification, adjust the post height follow the each adjustment procedure (Refer to above table).



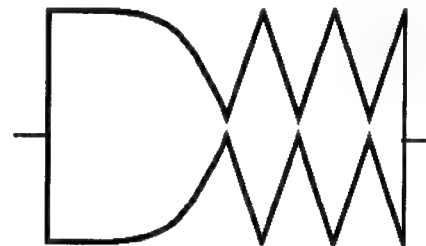
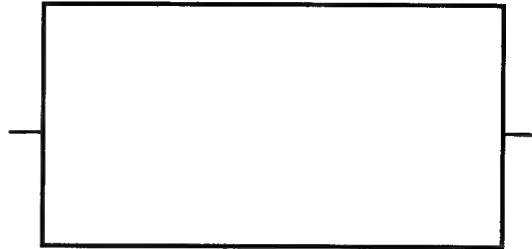
5-26. Confirmation of Play Start Envelope

TEST POINT	TP16:RP ENV (RF AMP Board:H1)
MODE	REW/REV → PLAY Loading completion → PLAY FF → PLAY
TAPE	L cassette(123min, Recorded tape) Tape beginning portion
M.EQ	Oscilloscope

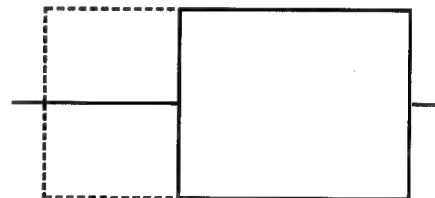
Note: This adjustment must be done after Envelope Waveform Adjustment.

1. Confirm that the envelope appears immediately, when the mode is changed from REW to PLAY, REV to PLAY, FF to PLAY, and Lording to PLAY mode.
2. If out of spec, adjust S4 post height.

OK



NG



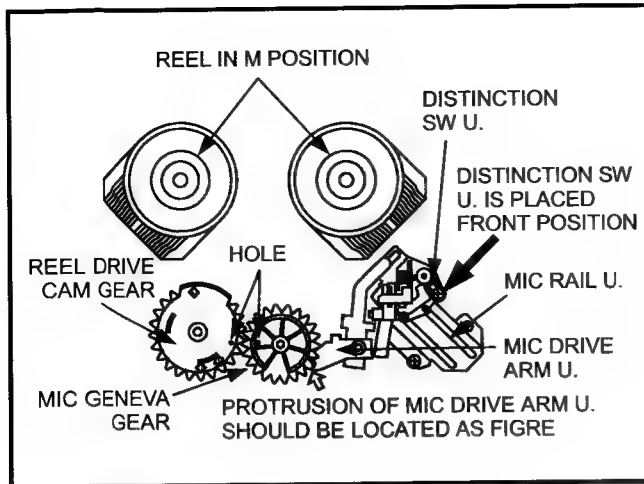


Fig.6-22-3 Gear Phase Adjustment

5. Install the Reel Drive Cam Gear and hole of Reel Drive Cam Gear should be matched with the hole of MIC Geneva Gear as shown in Figure 6-22-3.
6. Install the Cut Washer (A), (B) and (C) as shown in Figure 6-22-1.

※Point of Adjustment

- 1) Reel in M-Seize position.
- 2) Set the REC Inhibit SW in front position of Distinction SW Unit..
- 3) Portrusion of MIC Drive Arm Unit is positioned as shown in Figure 6-22-3.
- 4) Holes between Reel Drive Cam Gear and MIC Geneva Gear are matched.

6-23. T4 Post Phase Adjustment

1. Place unit into unloading condition.
2. Confirm that the hole (B) of T4 connection Gear was matched to hole of T4 post as shown in figure 6-23-1.
3. Confirm that the portion (C) of T4 connection Gear and hole (A), which are located as shown in figure 6-23-1.
4. If not, adjust the phase of T4 post follow the above procedure.

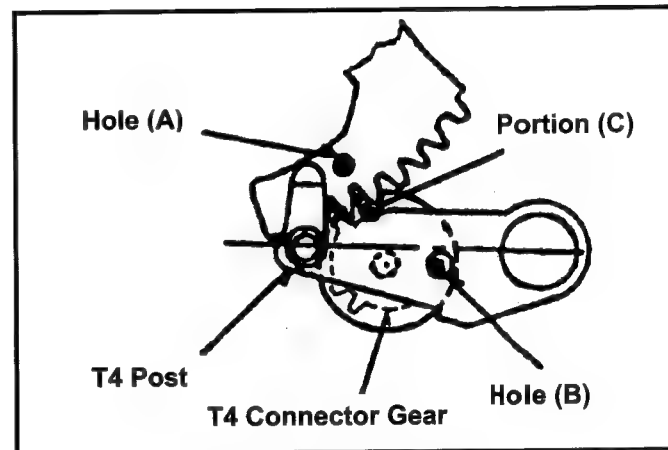


Fig.6-23-1 Phase of T4 Post

6-21. L-M Release Angle Unit Replacement

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Unscrew the 2 screws (A) and remove the L-M Release Angle Unit as shown in Figure 6-21-1.

(Installation)

1. Install the new L-M Release Angle Unit follow the removal steps reverse order.

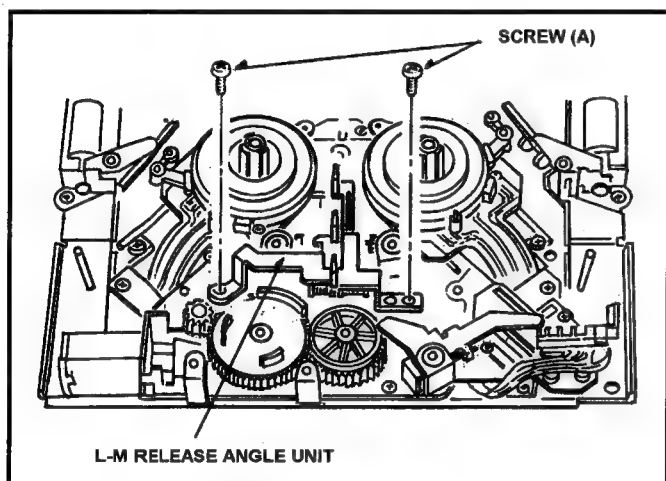


Fig.6-21-1 Removal of L-M Release Angle Unit

10. Remove the 2 Cut Washers (E) and remove the Supply and Take Up Base Drive Arm Unit.
11. Remove the 2 Cut Washers (F) and remove the Slide Rod Unit.

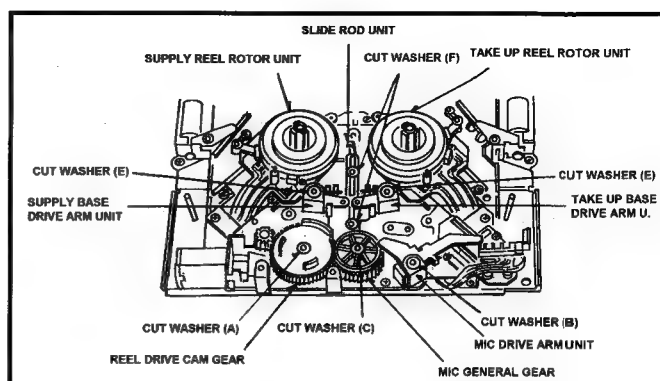


Fig.6-22-1 Removal of Slide Rod Unit

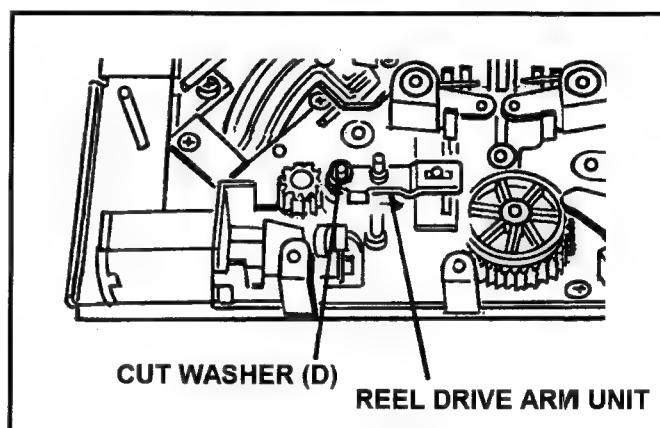


Fig.6-22-2 Removal of Reel Drive Arm Unit

6-22. Slide Rod Unit Replacement and Adjustment

(Removal)

1. Remove the Top Panel.
2. Remove the Front Loading Unit.
3. Remove the L-M Release Angle Unit. (Refer to item 6-21).
4. Remove the Reel Drive Sensor P.C.Board (Refer to item 6-20).
5. Remove the Cut Washer (A) and remove the Reel Drive Cam Gear.
6. Remove the Cut Washer (B) and remove the MIC Drive Arm Unit.
7. Remove the Cut Washer (C) and remove the MIC Geneva Gear.
8. Remove the Cut Washer (D) and remove the Reel Drive Arm Unit as shown in Figure 6-22-2.
9. Remove the Supply and Take Up Reel Rotor Unit (Refer to item 6-3).

(Installation)

1. Install the new Slide Rod Unit follow the removal steps in reverse order.
2. When install the Reel Drive Cam Gear and MIC Geneva Gear, then phase adjustment should be performed as follows.

(Adjustment)

1. Install the MIC Geneva Gear to the Chassis.
2. Place the Reels in the M-Size position by hand.
3. Install the MIC Drive Arm Unit.
4. Place the REC Inhibit SW in front position on Distinction SW Unit by rotation of MIC Geneva Gear, and then MIC Geneva Gear should be positioned as shown in Figure 6-22-2.

Note: Protrusion of MIC DRIVE Arm Unit is positioned as shown in Figure 6-22-2.

6-24. Thrust Adjustment Screw

Replacement and Adjustment

1. Remove the Thrust Adjustment Screw.
2. Enforce cleaning of point department of capstan shaft with an applicator.
3. Put the oil(VFK0906) on a new Thrust Adjustment Screw and install the upper end of the Capstan Housing.
4. Turn the Thrust Adjustment Screw slowly to counter-clockwise until the Capstan Rotor just starts turning (separate from the Capstan Rotor).
5. Turn the Thrust Adjustment Screw an another angle of 270° from 180° (about 225°) clockwise as shown in Fig. 6-24-2.
6. Put the glue (Ex:: Three Bond 1401B) on the Thrust Adjust Screw.
7. Confirm whether the Oil Seal does not come in contact with the Capstan Housing.

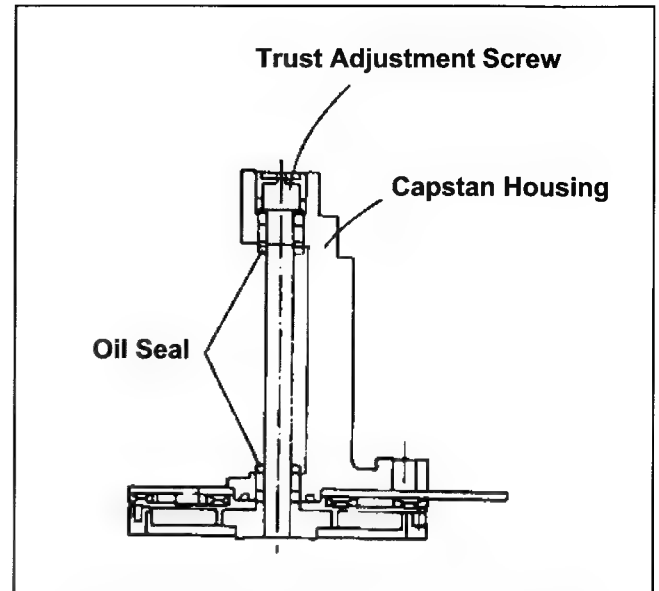


Fig.6-24-1 Removal of Thrust Adjustment Screw

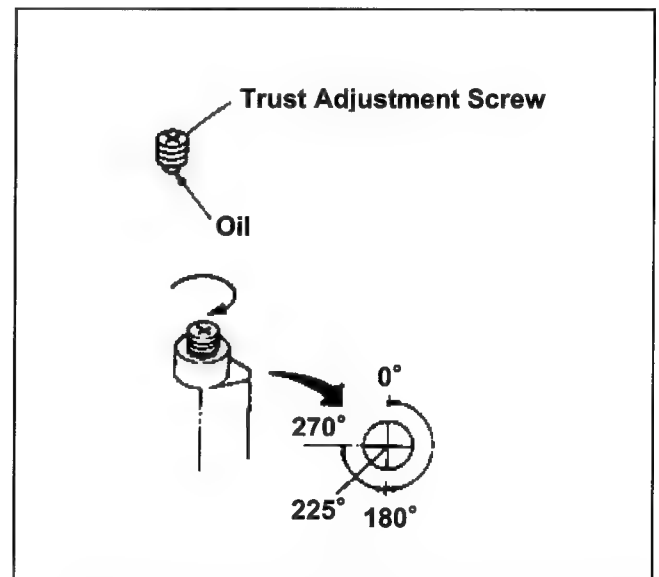


Fig.6-24-2 Adjustment of Thrust Adjustment Screw

SECTION 4

ELECTRICAL ADJUSTMENT

CONTENTS

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1-1.	+5V and +12V Confirmation & Adjustment	ELC-1
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4.	Servo	ELC-2
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7-2.	Sampling Position Adjustment	ELC-34
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7-4.	REF CF Detection Adjustment	ELC-35
7-5.	Composite Setup Adjustment	ELC-36
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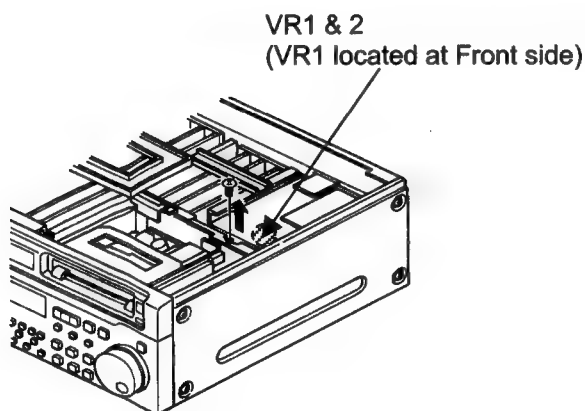
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1. POWER

1-1. +5V and +12V Confirmation & Adjustment

BOARD	POWER 2
SPEC.	5V: $5.1V \pm 0.1V$ 12V: $11.8V \pm 0.6V$
TEST	TP6 (+5V), TP12 (+12V) (SYSCON BOARD:F2)
ADJUST	VR1 (+5V), VR2 (+12V)
INPUT	-----
MODE	EJECT
M.EQ	Digital Volt Meter

1. After connect the test point on SYSCON Board, turn the power ON.
2. Confirm that the voltage at TP6 and 12 in the specification.
3. If it is not, adjust VR1 and VR2 so that the voltage in the specification.

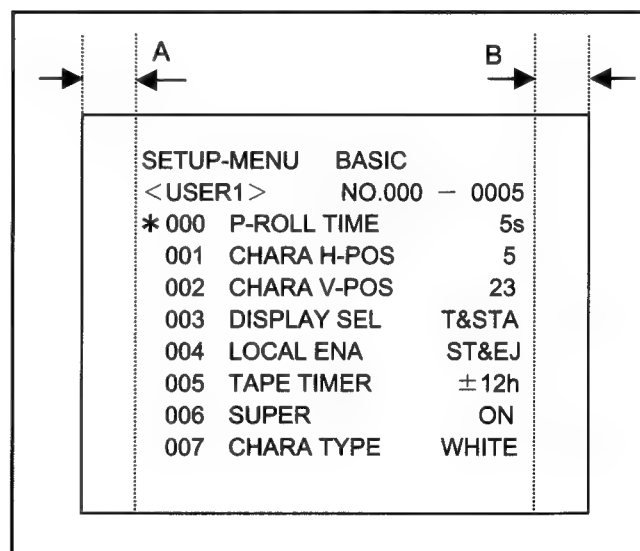


2. SYSTEM CONTROL

2-1. Super Impose Position Adjustment

BOARD	SYSCON (F2)
SPEC.	A = B
TEST	MONITOR
ADJUST	VC1
INPUT	-----
MODE	EJECT
M.EQ	Monitor TV

1. Press the MENU , and displayed the SETUP-MENU.
2. Adjust VC1 so that the width A and B are equal.
3. Press the MENU button, and finished the SETUP-MENU.
4. **NOTE:** The display of menu may be different the above figure.

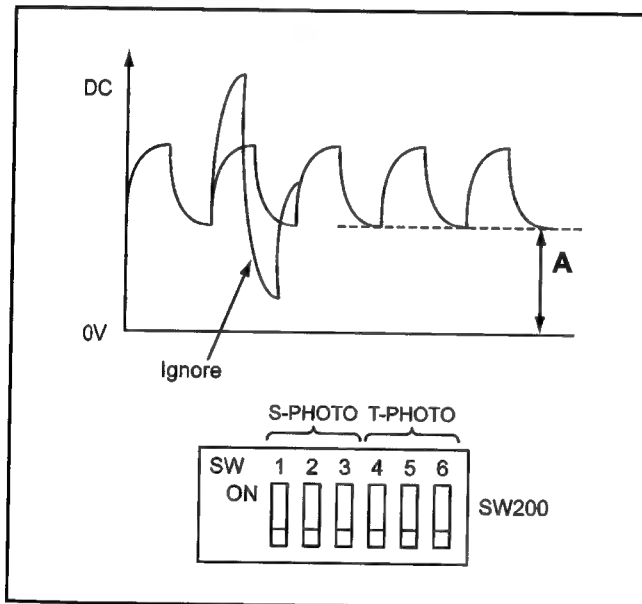


3. MECH INTERFACE

3-1. Photo Sensor Voltage Adjustment

BOARD	MECH INTERFACE
SPEC.	A = 3.1~4.2VDC
TEST	Pin 25 of Connector P2 (Supply) Pin 26 of Connector P2 (Take Up) (SYSCON BOARD)
ADJUST	DIP SW200 (MECH I/F BOARD)
INPUT	-----
MODE	EJECT
M.EQ	Oscilloscope VFK1423 (Tape Big./End Det. Cassette)

1. Remove the Bottom Panel.
2. Insert the VFK1423 and measure the voltage at Pin 25 and 26 of connector P2.
3. Set the Dip SW200 so that the DV voltage "A" in the specification.



SW1	SW2	SW3	S-PHOTO	Synthetic
SW4	SW5	SW6	T-PHOTO	Resistance
ON	ON	ON	A Voltage	420 Ω
OFF	ON	ON	UP	460 Ω
ON	OFF	ON	↑	660 Ω
OFF	OFF	ON	↑	750 Ω
ON	ON	OFF	↑	880 Ω
OFF	ON	OFF	↓	1050 Ω
ON	OFF	OFF	A Voltage	3300 Ω
OFF	OFF	OFF	DOWN	8200 Ω

4. SERVO

4-1. Motor Torque Offset Adjustment

BOARD	SERVIO (F1)
SPEC.	15±2grcm (5 times average)
TEST	Connect Monitor TV to VIDEO OUT3
ADJUST	A03:T-REEL TRQ A04:S-REEL TEQ (EVR on Service Menu)
INPUT	-----
MODE	EJECT
TAPE	No Tape
M.EQ	VFK1191 (Dial Torque Gauge) VFK1152 (Dial Torque Gauge Adapter)

1. Set the REEL TABLE to M-cassette position.
 2. Remove the Front Loading Unit with the connection cable or remove the Top Plate of Front Loading Unit, which is fixed by 6 screws.
 3. Open the SERVO ADJUST menu on the Service menu and select the item "A03:T REEL TRQ".
 4. Set a Dial Torque Gauge to top of Take-up Reel Table.
 5. Press the STOP button at 5 times and measure the value of Dial Torque Gauge at 5 times, then calculate the average and adjust EVR "T REEL TRQ" so that the average is in the specification.
- Note:** While press the STOP button, the REEL Table is rotated
6. Select the item "A04:S REEL TRQ".
 7. Set a Dial Torque Gauge to top of Take-up Reel Table.
 8. Press the STOP button at 5 times and measure the value of Dial Torque Gauge at 5 times, then calculate the average and adjust EVR "S REEL TRQ" so that the average is in the specification.

5.EQ and RF Adjustment

EQ and RF adjustment can be executed by RF AUTO EQ software and RF AUTO ADJUSTMENT TOOL.
This Service Manual mention of auto adjust procedure and manual adjustment procedure.

5-1. AUTO ADJUSTMENT PROCEDURE

5-1-1. Preparation and Connection of Auto EQ Adjustment Tool

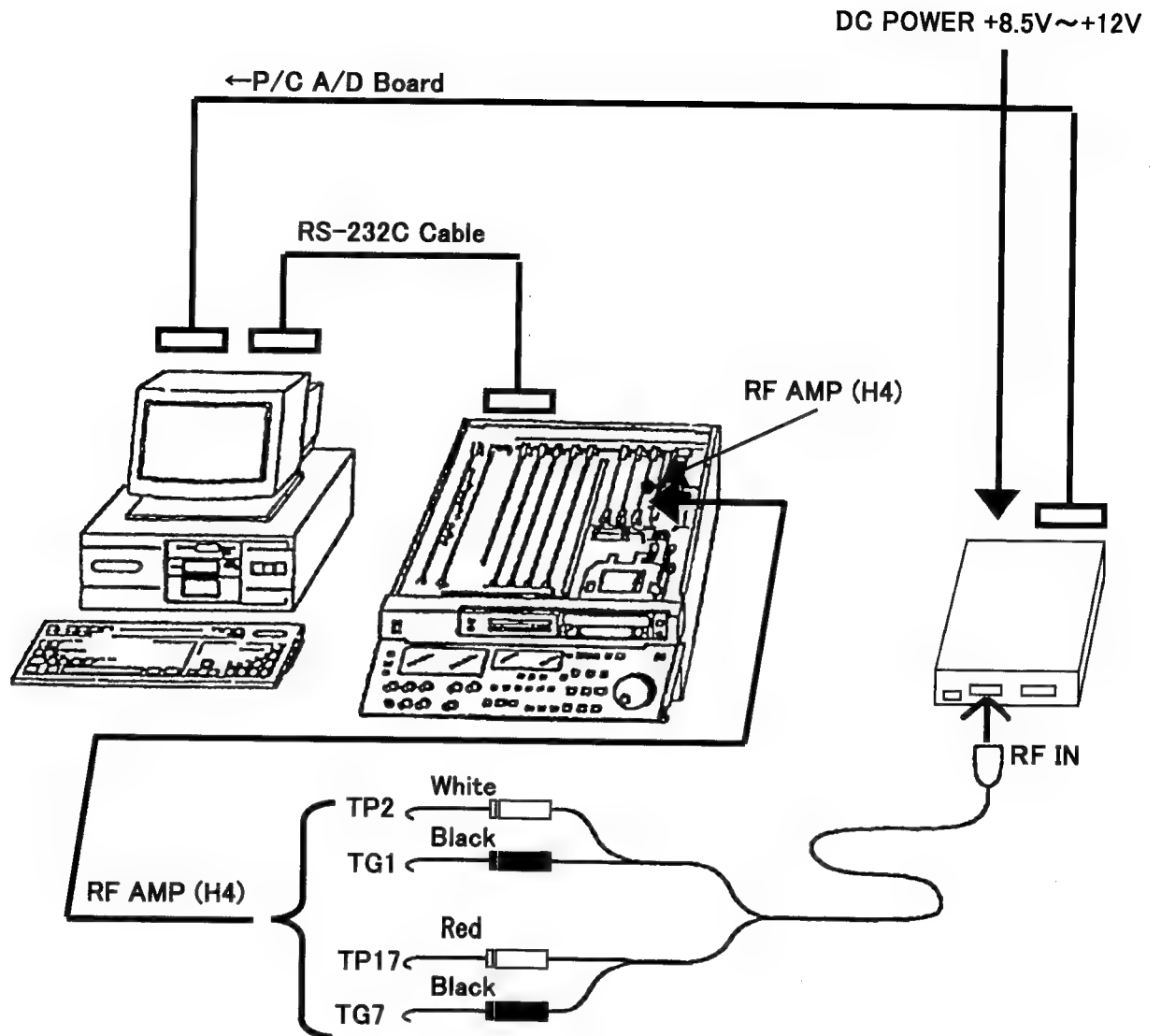
Test Point	TP2:PB HSW, TG1:GND (RF AMP Board:H4) TP17:PB ENV, TG7:GND (RF AMP Board:H4)
Equipment	<ul style="list-style-type: none">• RF Auto Adjustment Tool(VFK1163)<ul style="list-style-type: none">* This Tool attached 2 kinds of cable• RF Adjustment Software(VFK1160C)• IBM PC Compatible(486/66MHz or greater)• DAQ - 12 A/D Card(Quatech):<ul style="list-style-type: none">* This Board is install to PC as same as LISTA ADJ.• DC Power Supply(+8.5V to +12V)• RS - 232C Cable(type of Cross cable)
Tape	NTSC: VFM3580KM(DVCPRO), VFM3010EDS(DV) PAL: VFM3680KM(DVCPRO), VFM3110EDS(DV) Self - recording and Playback Tape

1. Supply DC Voltage(+8.5 to +12V) to EQ Tool. RF Adjustment Tool requires DC power supply(+8.5V to +12V).
Use DC power supply or AC Adaptor movie like " VW - AMC1 ".
2. Connect the extension board with RF AMP (H4) board and connect the clip of cable from EQ tool to Test Point follow as below table on the RF AMP P.C.Board.

WHITE CLIP	TP2	RED CLIP	TP17
BLACK CLIP	TG1	BLACK CLIP	TG7

3. Connect the 62 pin D - Sub connector of cable from EQ tool to A/D Board of PC.
4. Connect the RS232C cable to between VTR and PC.

Connection



Initial Setting

< Setting of VTR >

1. Open the Set Up Menu in User mode (do not use Service Mode) and confirm the menu is in <USER1> and set the RS-232C mode as shown below..

204	RS232C SEL	ON
205	BAUD RATE	9600
206	DATA LENGTH	8
207	STOP BIT	1
208	PARITY	NON
209	RETURN ACK	ON

2. Press SET button after setting the above items.
3. Set the LOCAL / REMOTE SW to REMOTE side.

During Automatic EQ adjustment, adjustment is done with ALIGNMENT tape, so rewind the necessary amount of adjustment tape (DVCPRO MASTER and DV MASTER tape) before boot up the EQ automatic adjustment software.

NOTE: When the VTR detected tape end position during adjustment, rewind the tape automatically to tape beginning position and continuation of adjustment.

Boot Up the RF Automatic Adjustment Software.

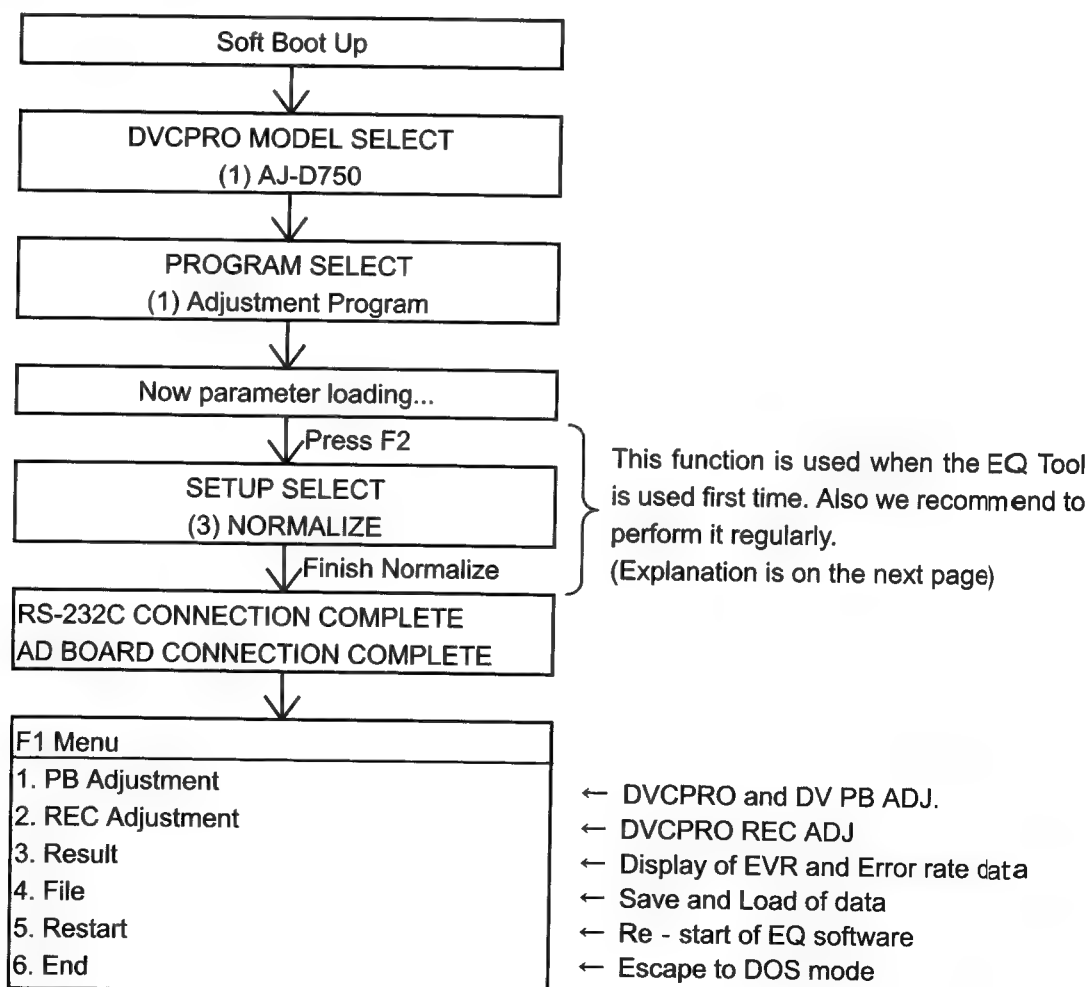
1. Boot Up the EQ Adjustment software after setting and connection.

★ Install and boot up

Copy the all files in the floppy disk of EQ adjustment software to hard disk(for example as directly " RF ADJ " : C:\RFADJ).

Executive file is DVCRF, so type " DVCRF " and press Enter, then boot up Auto EQ software.

2. Before boot up software, please confirm the tape does not into VTR and LOCAL/REMOTE switch on the front panel set to REMOTE side.
3. After boot up software, appear the message " DVCPRO MODEL SELECT " on the screen, then select the model. In case of the AJ - D440/450, select the item 「(1) AJ - D750」 .
4. Next select item 「(1) Adjusting Program」 on the " PROGRAM SELECT " menu.
5. After item 4 the parameter loading menu is appeared and wait about 20 second. This waiting time can be skipped by pressing ENTER key. Then "RS-232C CONNECTION COMPLETE", "AD BOARD CONNECTION COMPLETE" messages and Main Menu are appeared.



Command>Please Select No.!!!!

☆Normalize of RF AUTO ADJUSTMENT TOOL

Press <F2> enter to SET UP, then appeared display as below.

SETUP SELECT
(1) RS-232C
(2) AD
(3) NORMALIZE
(4) PRGKIND
(5) END
INPUT No!! or Select by cursor Key (U/D) and hit RETURN

Please select the "(3) NORMALIZE", and press Enter key, then appeared message " Play back the DVCPRO MASTER TAPE, Then PRESS ENTER Key " .

Insert DVCPRO color bar alignment tape and press Enter key, then measurement value appeared as indicated as below.

Tool BOX Normalizing				
	5MHz BPF	10MHzBPF	20MHzBPF	APF
USER DATA	0.025028	0.032613	0.030525	0.011855
DEFAULT DATA	0.028084	0.031761	0.030125	0.011872
Normalizing Again? [Y/N]				

When you use RF Adjustment Tool first time, please confirm that the value of USER DATA and DEFAULT DATA, which should be difference within +/- 0.01.

When performing this normalization regularly under condition of the same combination of the PC, A/D Board and EQ Tool, the difference of USER DATA and DEFAULT DATA should be with in +/- 0.005.

If USER DATA value is became out of spec, RF Adjustment Tool (VFK1163) have a problem.

In case of the data within spec, please select the "N", the appear the massage below.

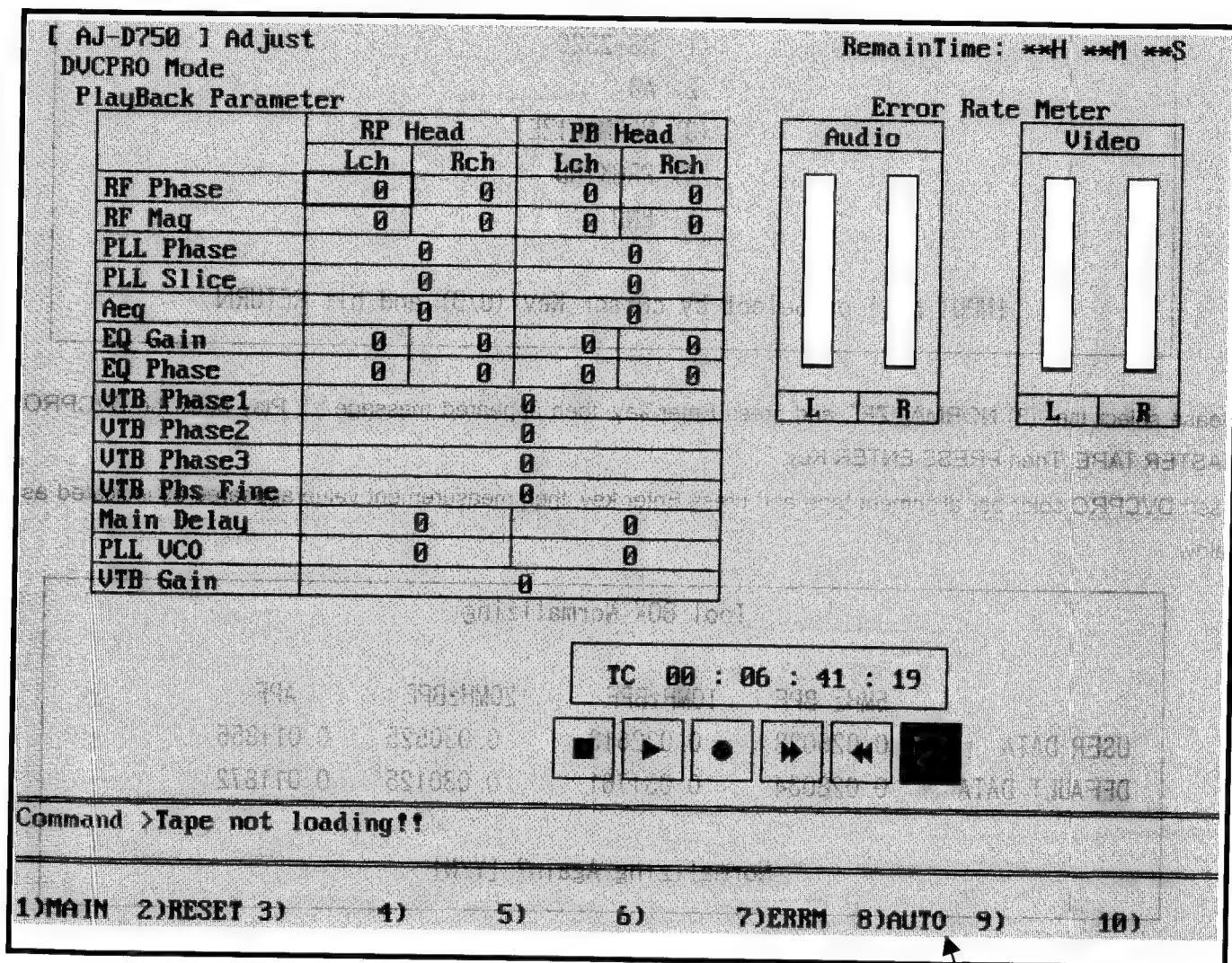
Please Select (U)ser / (D)efault!

Please select "U ", then appeared SETUP SELECT Menu.

Eject the tape and select "(5) END ", then the screen return to parameter loading.

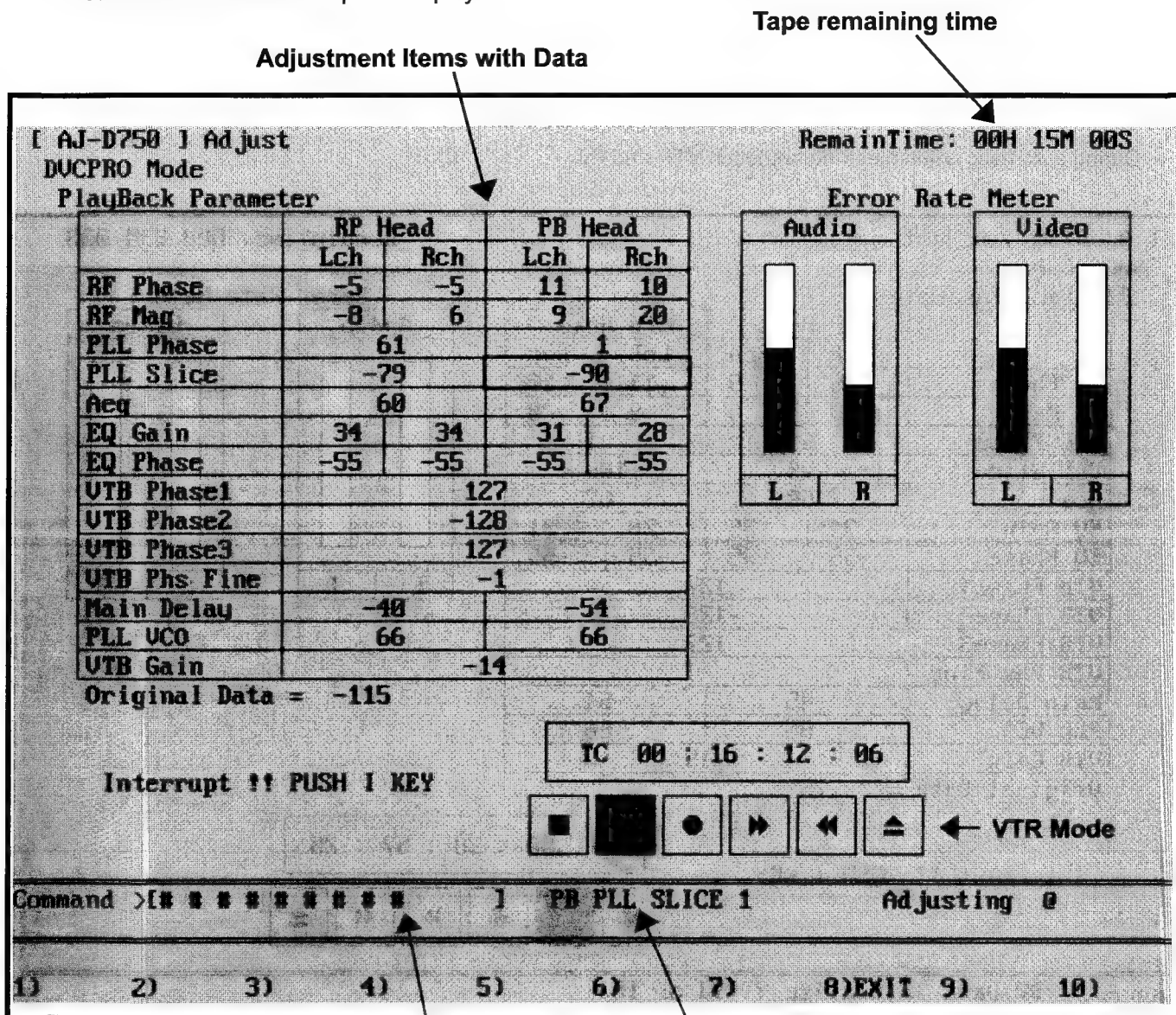
5-1-2. DVCPRO Playback Adjustment

1. Select "1. PB Adjustment" in the Main Menu.
2. Adjustment menu is appeared. "Tape not loading !!" message is appeared, press F8 key (AUTO) for automatic adjustment. The bottom numbers show the Function keys.



3. In the SELECT MENU, select "1. ALL Adjustment".
4. Then the message of "PLEASE INSERT DVCPRO MASTER TAPE" is appeared in the former adjustment menu, insert DVCPRO MASTER (VFM3580KM : NTSC) or (VFM3680KM : PAL).

- The following picture is appeared and automatic adjustment is started. During automatic adjustment, do not touch VTR and PC.
- Adjustment is completed in 7 or 8 minutes. Then DV Playback adjustment is started. At bottom of the screen, "Please insert DV master Tape" is displayed.



5-1-3. DV (Consumer) Playback Adjustment

This adjustment is done following DVCPRO Playback adjustment.

1. Tape is automatically ejected after DVCPRO Playback Adjustment. Insert DV MASTER Tape when "Please Insert DV MASTER" message is appeared.
 2. When "DV Data Initialize?" [(Y)es or (N)o]" message is appeared, select N.
 3. DV Playback automatic adjustment is started.
- During automatic adjustment, do not touch VTR and PC.

[AJ-D750] Adjust
DVCPRO Mode
PlayBack Parameter

RemainTime: 00H 03M 00S

	RP Head		PB Head	
	Lch	Rch	Lch	Rch
RF Phase	-5	-5	11	10
RF Mag	-8	6	9	20
PLL Phase	61		1	
PLL Slice	-75		-100	
Aeq	60		67	
EQ Gain	34	35	28	31
EQ Phase	-55	-35	-55	-55
UTB Phase1	127			
UTB Phase2	-128			
UTB Phase3	127			
UTB Phs Fine	-1			
Main Delay	-45		-54	
PLL UCO	66		66	
UTB Gain	-15			

Original Data = -75

Interrupt !! PUSH 1 KEY

TC 00 : 28 : 57 : 20

Error Rate Meter

Audio

Video

L R

L R

Command >DV Data Initialize ? [(Y) or (N)]

1) 2) 3) 4) 5) 6) 7) 8)EXIT 9) 10)

5-1-4. Confirmation of Error Rate (PLAYBACK)

- After DVCPRO and DV Playback adjustment, measured error rate is automatically displayed as shown below.

[AJ-D750] Adjust

Error Rate Data

Mode	Channel			
	AudioL	AudioR	VideoL	VideoR
PRO PB Master	-4.7	-5.0	-4.7	-4.8
PRO RP Master	-3.6	-4.2	-3.6	-4.0
DV Master	-4.3	-5.2	-4.1	-4.5
PRO Conf Play	****	****	****	****
PRO Self Play	****	****	****	****

← (A)

← (B)

← (C)

Command >Hit <RETURN> Key !!

1) 2) 3) 4) 5) 6) 7) 8)EXIT 9) 10)

- Confirm the numbers at (A), (B) and (C) they are displayed in Green.
If the color is red the error rate is too high.
Especially the numbers at (A) and (C) must be Green. If part of row of (B) is red, clean the head and the tape transportation and re-adjust the DVCPRO RP Playback adjustment.

<Procedures>

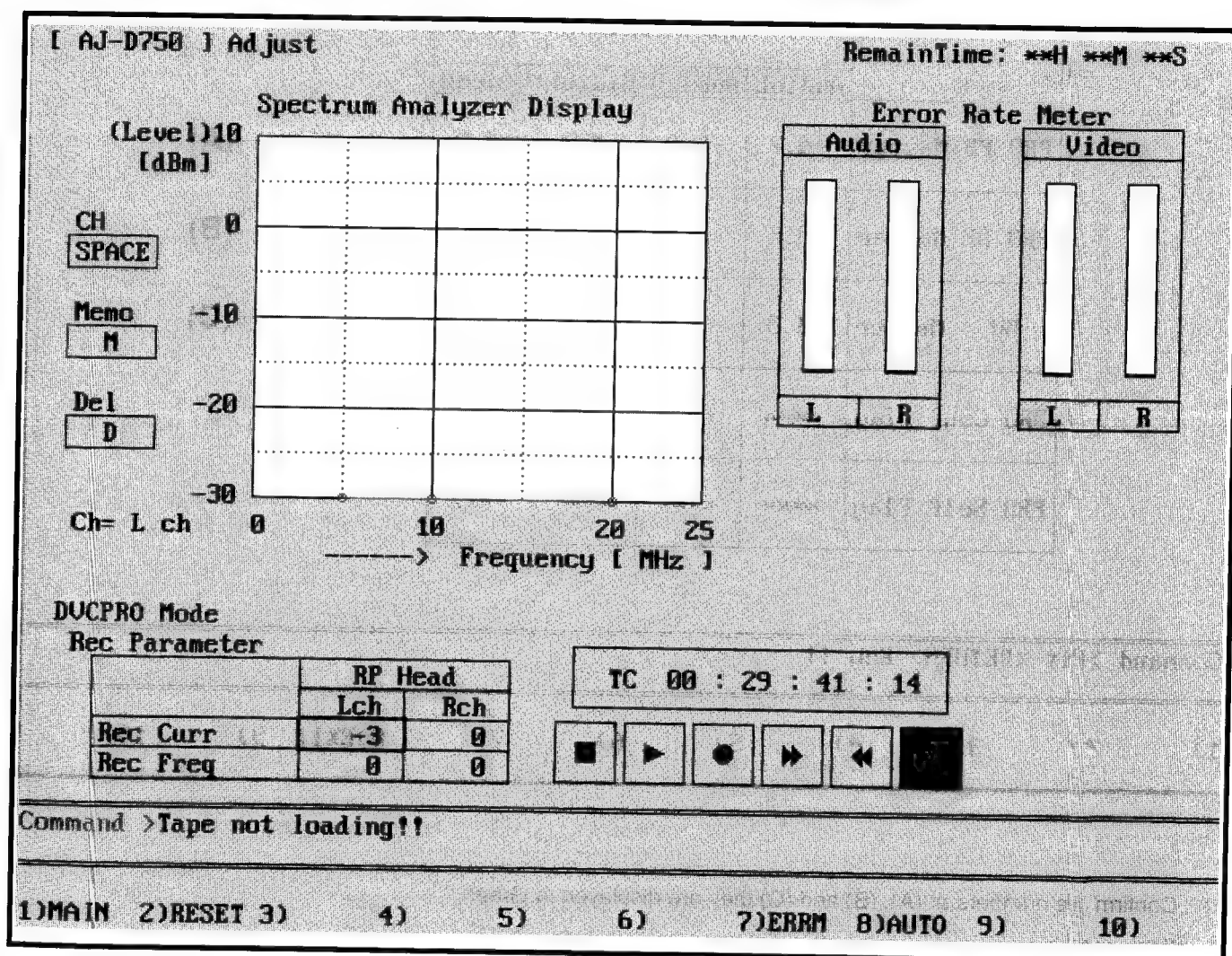
- If Return key is pressed, Select Menu is displayed and select "3. DVCPRO RP ONLY Adjustment". Then follow the message on PC and re-adjust RP mode only.
- After adjustment error rate is automatically displayed.

Confirm the error rate and if they are correct, do the next adjustment.

5-1-5. DVCPRO Recording Adjustment

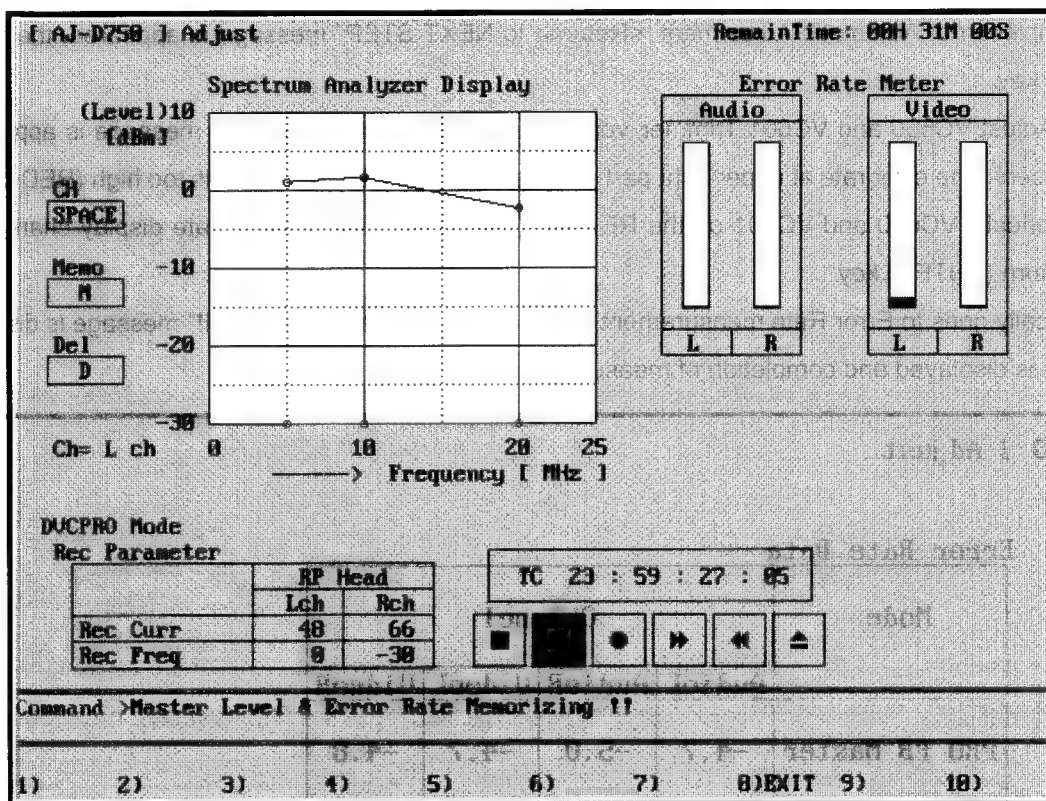
Start the DVCPRO Recording Adjustment after Playback Adjustment and Error Rate Confirmation.

1. Return to Main Menu. Press Enter key on the Error Rate Display Menu and open the Sub menu.
2. Select "6. Return to manual" and press F1 key (MAIN) and return to Main Menu.
3. Select "2. REC Adjustment" and following "REC Adjustment " menu is appeared.

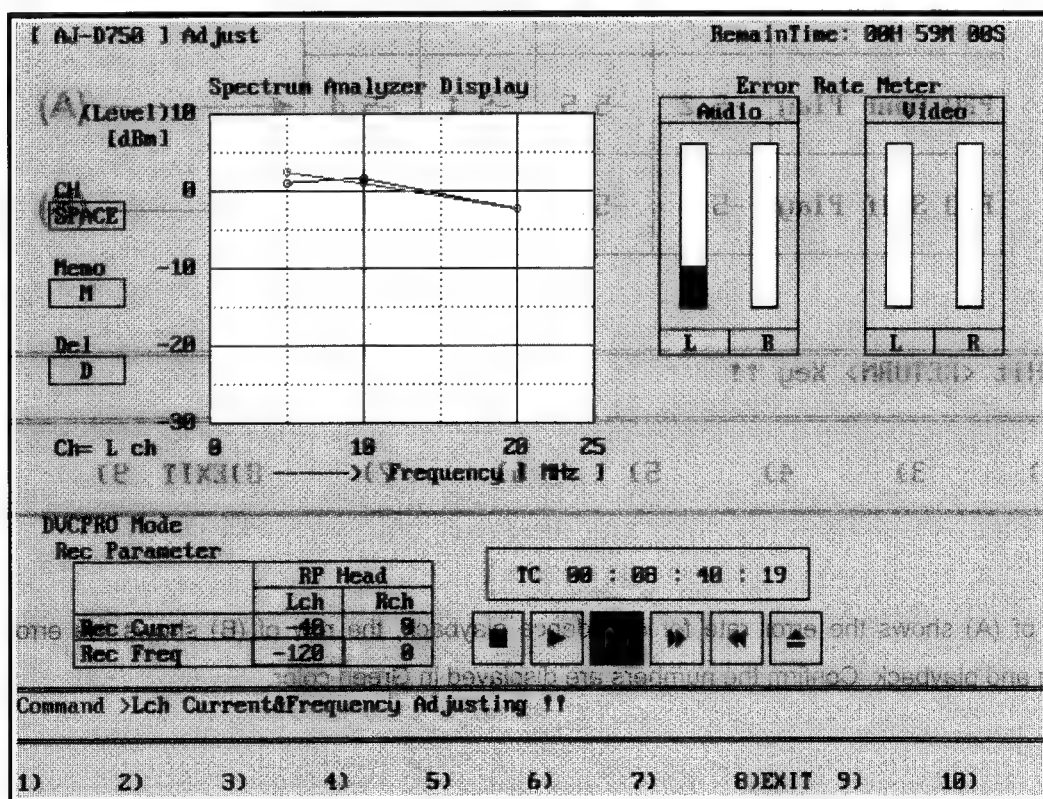


4. Tape not loading message is appeared. For the automatic adjustment press F8 key (AUTO).
5. Select "1. Adjust start" in the Sub Menu.
6. The messaged of "Please Insert DVCPRO MASTER TAPE (COLOR BAR)" is appeared, and insert the DVCPRO color bar master tape. After inserting the master tape, Master level and error rate level are automatically memorized.

7. During data memorizing, following menu is appeared and waveform is appeared in the Spectrum Analyzer Display part.



8. Tape is ejected after completion of Master Tape Data Memorizing, and "Please Insert Blank Tape" message is appeared. Then insert self recording and playback tape.
9. Start the Automatic Adjustment.



5-1-6. Confirmation of Error Rate (REC)

1. After completion of Automatic Adjustment '<Return> to NEXT STEP' message is appeared, the press Return (ENTER) key.
2. "Please Adjust VC600 and VC601 Trimmer Volume and Minimize Error Rate !!" message is appeared. At this menu, observe the error rate at upper right part of the screen and if the error rate is too high (RED color display), adjust manually VC600 and VC601 on the RF AMP (H4) BOARD. If the error rate display changed to green, press Return (ENTER) key.
3. Automatically goes to Error Rate measurement mode and "Error Rate Checking !!" message is displayed.
4. Error rate is displayed and completion of measurement.

[AJ-D750] Adjust

Error Rate Data

Mode	Channel			
	AudioL	AudioR	VideoL	VideoR
PRO PB Master	-4.7	-5.0	-4.7	-4.8
PRO RP Master	-3.6	-4.2	-3.6	-4.0
DV Master	-4.3	-5.2	-4.1	-4.5
PRO Conf Play	-5.2	-5.5	-5.1	-5.4
PRO Self Play	-5.5	-5.5	-5.5	-5.5

← (A)

← (B)

Command >Hit <RETURN> Key !!

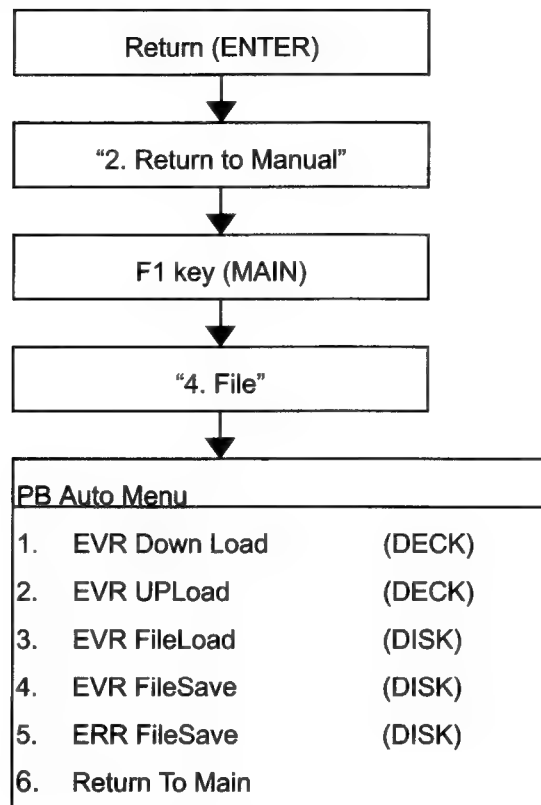
1) 2) 3) 4) 5) 6) 7) 8)EXIT 9) 10)

5. The row of (A) shows the error rate for confidence playback, the row of (B) shows the error rate for self recording and playback. Confirm the numbers are displayed in Green color.

Save RF Data and Error Rate Data

RF Adjustment result data and error rate data can be saved.

1. Return to MAIN Menu from Recording Adjustment menu.
2. The procedures are show below.



Command>Please Select No!!!!

3. item 3 is EVR data loading, item 4 is EVR data saving and item 5 is Error rate data saving.

[AJ-D750] Adjust

PlayBack Parameter

	RP Head		PB Head		DU Head	
	Lch	Rch	Lch	Rch	Lch	Rch
RF Phase	-54	-31	-14	-7	0	0
RF Mag	3	18	-18	6	0	0
PLL Phase	62		29		24	
PLL Slice	-73		-100		-90	
Aeq	80		76		55	
EQ Gain	36	30	29	27	15	20
EQ Phase	-56	-61	-55	-55	-40	0
UTB Phase1	127				127	
UTB Phase2	-128				-128	
UTB Phase3	127				127	
UTB Phs Fine	-1				-1	
Main Delay	-45		-45		-40	
PLL UCD	66		66		66	
UTB Gain	-17				-16	

Rec Parameter

	RP Head	
	Lch	Rch
Rec Curr	80	71
Rec Freq	30	0

Select the Drive

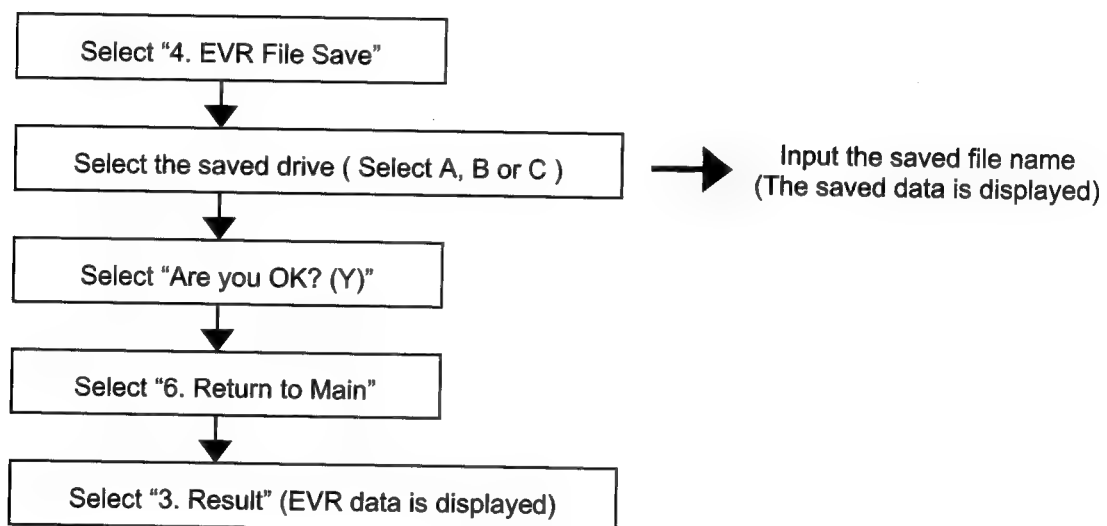
Command >Please Select Drive Name !! A B C

<< EVR File Save >>

1. Select "4. EVR File Save". All parameters are displayed and select the drive for data saving.
2. Enter the file name and comment after selecting the drive. File name must be in 8 characters, and comment is must be in 20 characters. The adjustment data for VTR can be managed same as linearity data. After enter the File name and comment, Sub-menu is automatically displayed. Then save the EVR data.

<< EVR File Load >>

1. Select "3. EVR File Load (DISK) for reading the EVR data from PC.
2. Select the drive follow the screen message input the saved filename, then EVR data displayed on the screen.
3. When escape from this EVR data display, press " Y " key follow the message " Are You OK " , then return to Sub-menu (File selected menu)



<< Save the Error Data >>

1. Displayed PB Auto Menu as the same as step of introduction << Save and Reading the EVR Data >>.
2. Select " 5. ERR File Save " on the PB Auto menu.
3. The Error rate data is saved to same directly as AUTO EQ software, which is file " ERRDATA.DAT " Therefore it file can only entry the comment.
4. After input comment, Auto EQ software is executed saving operation and return to PB Auto menu.

<< Load the Error Data >>

1. The saved Error data file read on the Editor after return to Dos mode.
2. The contents of Error data file, which display from left side on the screen “ date of saving(month/day/year),comment and error data.” .
3. Order to display of Error data from left side, which display as numerical value of upper left (PRO PB MASTER – Audio L) on the error rate table of Auto EQ software display and next to right numerical value displayed. And next row of numerical value (PRO RP MASTER – Audio L) displayed from left to right direction. Therefore most of right side of numerical value on Editor display, which is numerical value of “PRO Self Play – Video R” .

<< EVR Up Load >>

When EVR file data load to VTR from PC. First EVR file load have to executed follow the procedure on previous page.

1. Select the item “2 EVR UP Load” and press “U” Key follow the message “ (D)efault or (U)ser Data Up Load ” .
2. After press “U” button appear the message “Up Load Complete !! Are You OK? [(Y)es or (N)o], then press (Y) button for up load EVR data to VTR.

<< EVR Down Load >>

Note: The EVR data keep on EQ software until escape DOS mode after Auto EQ adjustment finished. Therefore if you want to save EVR data without execute Auto EQ adjustment, necessary EVR Down Load operation.

1. Select the item “ 2.EVR Down Load ” and press “U” Key follow the message “ (D)efault or (U)ser Down Load ” .
2. After press “U” button appear the message “Down Load Complete !! Are You OK? [(Y)es or (N)o], then press (Y) button for EVR data down load to PC from VTR.

After finish EVR Down Load, perform “ EVR File Save ” for file save to disk drive follow the follow the procedure on previous page.

5-2. MANUAL ADJUSTMENT PROCEDURE

RF ADJUSTMENT

5-2-1. Pre EQ Adjustment

BOARD	RF AMP board (H4)
SPEC.	2.5VDC \pm 0.2V(DVCPRO) 2.0+0.5V(DV)
TEST	TP20, TP18, TP1 and TP2 (Trigger)
ADJUST	C09:RP MAG L, C10:RP MAG R, C13:PB MAG L, C14:PB MAG R (EVR on RF ADJUST menu)
MODE	PLAY
TAPE	DV Alignment tape (NTSC: VFM3010EDS, PAL: VFM3110EDS) DVCPRO Alignment tape (NTSC: VFM3580KM, PAL: VFM3680KM)
M.EQ	Oscilloscope Monitor TV (Connect to VIDEO 3 OUT)

1. Open the RF ADJUST menu on the Service Menu.
2. Connect the Scope to TP1 for trigger.
3. Connect the Scope to TP20 and connect the ground to TG9.
4. Playback a color bar portion of the DV Alignment Tape.
5. Adjust EVR "C09:RP MAG L" and "C10:RP MAG R" so that the DC voltage is become 2.0V+0.5V.
6. Playback a color bar portion of DVCPRO Alignment Tape.
7. Adjust EVR "C09:RP MAG L" and "C10:RP MAG R" so that the DC voltage is become 2.5V+0.5V.
8. Connect the scope to TP18 and connect the ground to TG9.
9. Connect the scope to TP2 for trigger.
10. Adjust EVR "C13:PB MAG L" and EVR "C14:PB MAG R" so that the DC voltage is become 2.0V+0.5V.

Note: How to adjust the EVR.

- (1) Press the MENU button on the front bottom panel, then "SET UP Menu" appeared on the screen.
- (2) Keep holding press EJECT and STOP button, press the MENU button on the front bottom panel, then "Service Menu" appeared on the screen.
- (3) Select the item "C00: RF ADJUST" by \blacktriangle or \blacktriangledown button and press the SET button on the front bottom panel, then open "RF ADJUST" menu.
- (4) Select the adjustment item by Cursor button, then move the start mark "*" to the adjusting item.
- (5) Adjust EVR by press \blacktriangleleft or \blacktriangleright button, then adjustment value is changeable.

5-2-2. RF AMP PB Phase Adjustment

BOARD	RF AMP board (H4)
SPEC.	Minimum of Error Rate
TEST	Front Display
ADJUST	C07:RP PHASE L, C08:RP PHASE R C11:PB PHASE L, C12:PB PHASE R (EVR on RF ADJUST menu)
MODE	PLAY
TAPE	DV Alignment tape (NTSC: VFM3010EDS, PAL: VFM3110EDS) DVCPRO Alignment tape (NTSC: VFM3580KM, PAL: VFM3680KM)
M.EQ	Monitor TV (Connect to VIDEO 3 OUT)

1. Open the RF Adjust menu on the Service menu and set as follows.

C20	ERROR MODE	FAST
C19	PB MODE	RP H
C18	VITERBI MODE	ON
C17	CONCEAL MODE	OFF
C16	ECC MODE	AL OFF

2. Confirm that the Audio level meter is became video error display mode.
3. Playback the DV color bar portion of Alignment Tape.
4. Adjust EVR "C07: RP PHASE L" and "C08:RP PHASE R" so that the error rate is minimum.
5. Playback the color bar portion of DVCPRO Alignment tape.
6. Adjust EVR "C07:RP PHASE L" and "C08:RP PHASE R" so that the error rate is minimum.
7. Set the item "C19:PB MODE" to PB H.
8. Adjust "C11:PB PHASE L" and "C12:PB PHASE R" so that the error rate is minimum.

5-3. EQ ADJUSTMENT

5-3-1. PLL Lock Adjustment (PB)

BOARD	EQ Board (H3)
SPEC.	-----
TEST	TP403, Monitor
ADJUST	VR410, B01:PB PLL PHASE, B02:PB PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV Oscilloscope

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service Menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape and confirm the picture is appeared on the monitor.
4. If picture is not appeared, adjust following items
 - (1) Connect the scope to TP403 and adjust VR410 so that the DC voltage is become 2.1VDC.
 - (2) Adjust "B01:PB PLL PHASE" and "B02:PB PLL SLICE" so that the picture appears on the monitor.
5. Repeat STOP to PLAY mode, and confirm the Picture is surely appeared every time.

5-3-2. PLL Latch Phase Coarse Adjustment (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B01:PB PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B01:PB PLL PHASE" so that the video error rate becomes minimum.

5-3-3. PLL Slice Level Coarse Adjustment (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B02:PB PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B02:PB PLL SLICE" so that the video error rate becomes minimum.

5-3-4. EQ Adjustment (1) (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B19:PB MAIN DL (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B19:PB MAIN DL" so that the video error rate is minimum.

5-3-5. EQ Adjustment (2) (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B03:PB AEQ, B04:PB GAIN L, B05:PB PHASE L, B06:PB GAIN R, B07:PB PHASE R (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust each adjustment item so that the each portions error rate becomes minimum as shown in the table.

Procedures	Adjust VR	Error Rate Portion
1	PB AEQ	VIDEO R & L CH
2	PB GAIN L	VIDEO L CH
3	PB PHASE L	VIDEO L CH
4	PB GAIN R	VIDEO R CH
5	PB PHASE R	VIDEO R CH

5-3-6. PLL Latch Phase Fine Adjustment (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B01:PB PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B01:PB PLL PHASE" so that the video error rate becomes minimum.

5-3-7. PLL Slice Level Fine Adjustment (PB)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B02:PB PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B02:PB PLL SLICE" so that the video error rate becomes minimum.

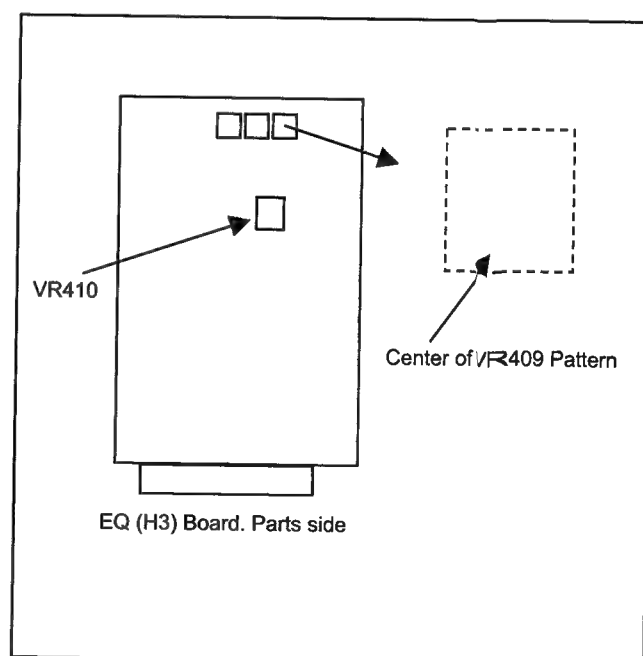
5-3-8. Viterbi A/D Input Level Adjustment

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Center of VR409 pattern Error Rate Level Meter (Front display)
ADJUST	B23:VITABI GAIN, VR801, (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	ON
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B23:VTB GAIN" so that the video error rate becomes minimum.
5. Connect the Electric Volt Meter to " Center of VR409 Pattern " as shown as below figure and confirm the DC voltage is 2.1V DC to 2.4VDC. If it is not, adjust VR801.



5-3-9. PLL Lock Adjustment (R/P)

BOARD	EQ Board (H3)
SPEC.	-----
TEST	TP203, Monitor TV
ADJUST	VR210, B08:RP PLL PHASE, B09:RP PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape and confirm the picture appears on the monitor.
4. If the picture is not appeared adjust following items.
 - (1) Connect the Electric Volt Meter to TP203 and adjust VR210 so that the DC voltage is 2.1VDC.
 - (2) Adjust "B08:RP PLL PHASE" and "B09:RP PLL SLICE" so that the picture appears on the monitor.
5. Repeat STOP to PLAY and confirm the picture is surely appeared.

5-3-10. PLL Latch Phase Adjustment (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B08:RP PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B08:RP PLL PHASE" so that the video error rare is minimum.

5-3-11. PLL Slice Level Adjustment (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B09:RP PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B09:RP PLL SLICE" so that the video error rare is minimum.

5-3-12. EQ Adjustment (1) (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B20:RP MAIN DL (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B20:RP MAIN DL" so that the video error rare is minimum.

5-3-13. EQ Adjustment (2) (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B10:RP AEQ, B11:RP GAIN L, B12:RP PHASE L, B13:RP GAIN R B14:RP PHASE R (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode on VTR.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust the each EVR so that the error rate is minimum.

Procedures	Adjust VR	Correspond of Error Rate Portion
1	RP AEQ	VIDEO R & L CH
2	RP GAIN L	VIDEO L CH
3	RP PHASE L	VIDEO L CH
4	RP GAIN R	VIDEO R CH
5	RP PHASE R	VIDEO R CH

5-3-14.PLL Latch Phase Fine Adjustment (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B08:RP PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode on VTR.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust RP PLL PHASE so that the error rate is minimum.

5-3-15. PLL Slice Level Fine Adjustment (R/P)

BOARD	EQ Board (H3)
SPEC.	Error Rate minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B09:RP PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Monitor TV

1. Set the Error Rate display mode on VTR.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B09:RP PLL SLICE" so that the error rate is minimum.

5-3-16. PLL Lock Confirmation (Consumer DV)

BOARD	EQ Board (H3)
SPEC.	-----
TEST	Monitor TV
ADJUST	B02:PB PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode on VTR.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape and confirm the picture appears on the monitor.
If picture is not appeared adjust "B02:PB PLL SLICE." so that the picture appears on the monitor.
4. Repeat STOP to PLAY and confirm the picture is surely appeared.

5-3-17. PLL Slice Level Coarse Adjustment (Consumer DV)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B02:PB PLL SLICE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B02:PB PLL SLICE", so that the video error rate is minimum.

5-3-18. EQ Adjustment (1) (Consumer DV)

BOARD	EQ (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B19:PB MAIN DL (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B19:PB MAIN DL" so that the video error rate is minimum.

5-3-19. EQ Adjustment (2) (Consumer DV)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B03:PB AEQ, B04:PB GAIN L, B05:PB PHASE L, B06:PB GAIN R, B07:PB PHASE R (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust each EVR so that the error rate is minimum.

Procedures	Adjust VR	Correspond of Error Rate Portion
1	PB AEQ	VIDEO R & L CH
2	PB GAIN L	VIDEO L CH
3	PB PHASE L	VIDEO L CH
4	PB GAIN R	VIDEO R CH
5	PB PHASE R	VIDEO R CH

5-3-20. PLL Slice Level Fine Adjustment (Consumer DV)

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B08:PB PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	RP H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Adjust "B08:PB PLL SLICE" so that the video error rate becomes minimum.

5-3-21. Consumer DV Viterbi Confirmation

BOARD	EQ Board (H3)
SPEC.	Error Rate Minimum
TEST	Error Rate Level Meter (Front display)
ADJUST	B23:VTB GAIN, B01:PB PLL PHASE (EVR on EQ ADJUST menu)
INPUT	-----
MODE	PLAY
TAPE	(Consumer DV Alignment Tape) NTSC:VFM3010EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode.
2. Open the EQ ADJUST menu on Service menu and set as follows.

B28	ERROR MODE	FAST
B27	PB MODE	PB H
B26	VITERBI MODE	OFF
B25	CONCEAL MODE	OFF
B24	ECC MODE	AL OFF

3. Playback the Alignment tape.
4. Confirm the error rate is improved by Viterbi on.
The improvement can be confirmed by the error rate meter decrease 5 scale on the front audio meter.
5. If the error rate is not improved so much, adjust "B23:VTB GAIN" and "B01:PB PLL PHASE".

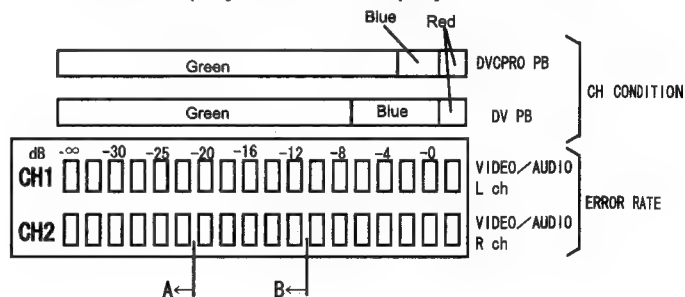
5-3-22.Final confirmation of Error Rate.

BOARD	EQ Board (H3)
SPEC.	DVCPRO (PB mode) : under the A DV (PB mode) : under the B
TEST	Error Rate Level Meter (Front display)
MODE	PLAY
TAPE	(DVCPRO Alignment Tape) NTSC: VFM3580KM, PAL: VFM3680KM (Consumer DV Alignment Tape) NTSC:VFM3110EDS, PAL:VFM3110EDS
M.EQ	Monitor TV

1. Set the Error Rate display mode
2. Open the EQ ADJUST menu on Service menu and set as follows.

ITEM of the MENU	DVCPRO	DV
B28: ERROR MODE	FAST	FAST
B27: PB MODE	PB H	RP H
B26: VITERBI MODE	ON	ON
B25: CONCEAL MODE	OFF	OFF
B24: ECC MODE	AL OFF	AL OFF

3. Set the Audio Channel indicator to "CH2" by pressing DIAG button (Video error is appeared on the Audio meter).
4. Confirm that the Error rate in specification, on DVCPRO playback and DV playback mode.



5-4. REC AMP Board

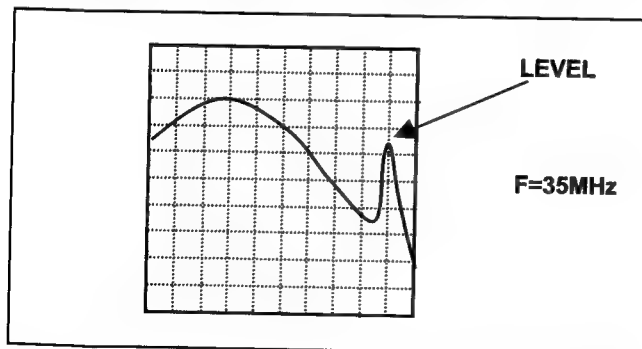
5-4-1. REC Current, Frequency Characteristic Adjustment

BOARD	RF AMP (H4)
SPEC.	-----
TEST	TP17, TG7 (GND), TP2 (TRIG)
ADJUST	C01:REC CURR L, C03:REC CUR R C02:REC FREQ L, C04:REC FREQ R (EVR on RF ADJUST menu) VC600, VC601
INPUT	100% Colour bar
MODE	PLAY, REC / PLAY
TAPE	NTSC: VFM3580KM, PAL: VFM3680KM Blank Tape
M.EQ	Spectrum Analyzer / Monitor TV (Connect to VIDEO 3 OUT)

1. Connect the trigger of spectrum Analyzer at TP2 and connect the Spectrum Analyzer in at TP17 with 50ohm coaxial cable (Use GND at TG7).
2. Set the Error Rate display mode.
3. Open the RF ADJUST menu on Service menu and set as follows.

C20	ERROR MODE	FAST
C19	PB MODE	PB H
C18	VITERBI MODE	ON
C17	CONCEAL MODE	OFF
C16	ECC MODE	AL OFF

4. Playback the Alignment tape and Store the waveform on the spectrum Analyzer in TRACE-A.
5. Eject the Alignment tape and insert a Blank tape and record a colour bar 100% signal.



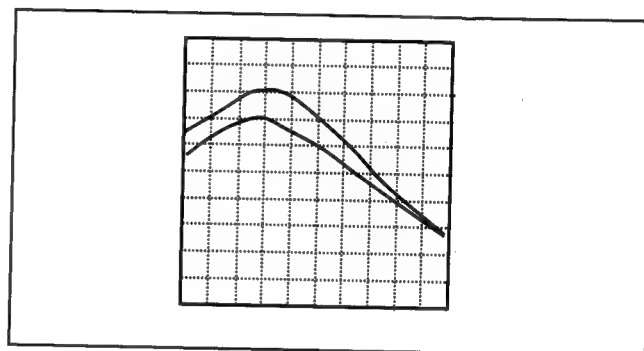
6. Set the TRACE-B mode on Spectrum Analyzer and Adjust VC600 and VC601 so that the peak level of 35MHz portion is minimum.
7. Adjust "C01:REC CUR L" and "C03:REC CUR R" so that the level of 5MHz portion is become -4dB \pm 0.5dB per the waveform of TRACE-A.

8. Adjust "C02:REC FREQ L" and "C04:REC FREQ R" so that the level at 20MHz portion is become maximum.

POINT: Set the confidence playback level is lower less than level of TRACE-A and increase the gain gradually by Search Dial so that the level is maximum.

Please set the adjustment value in the first place the level is become maximum.

9. Confirm that the error rate is less than -12dB digit on the level meter. (Refer to item 5-3-22)
10. If the level of TRACE-B is not same as TRACE-A, confirm that the level of TRACE-B is within 0 to -2dB against TRACE-A (spec: 0 to -2dB).
11. Record for one minute keeping the above condition. Then playback the just recorded portion and confirm the error rate is same or better than DVCPRO playback (Refer to item 5-3-22 : equivalent level of DVCPRO Alignment tape playback).



■ ITEM PARAMETER

REF. LEVEL	-25dB
ATT	10dB
DIV	5dB/DIV
START FREQUENCY	0KHz
STOP FREQUENCY	40MHz
RES VW	1MHz
VBW	3KHz
SWEEP	300msec
TRIGGER	EXT(HEAD SW)

5-4-2. Rotary Erase Current Adjustment

BOARD	RF AMP (H4)
SPEC.	$1.0 \pm 0.12V$
TEST	TP11, TP12
ADJUST	VR13, VR14
INPUT	100% Colour Bar
MODE	REC / PLAY
TAPE	Blank Tape
M.EQ	Oscilloscope

1. Insert a REC/PLAY tape auto record a 100% colour bar signal.
2. Connect a scope to TP11 with 10:1 probe and adjust VR 13 (RE A) so that the DC level is in the specification ($1.0V \pm 0.12V$).
3. Then connect the scope to TP12 and adjust VR14 (RE B) so that the DC level is in the specification ($1.0V \pm 0.12V$).

6. REC PB

6-1. PLL Lock DC Level Adjustment

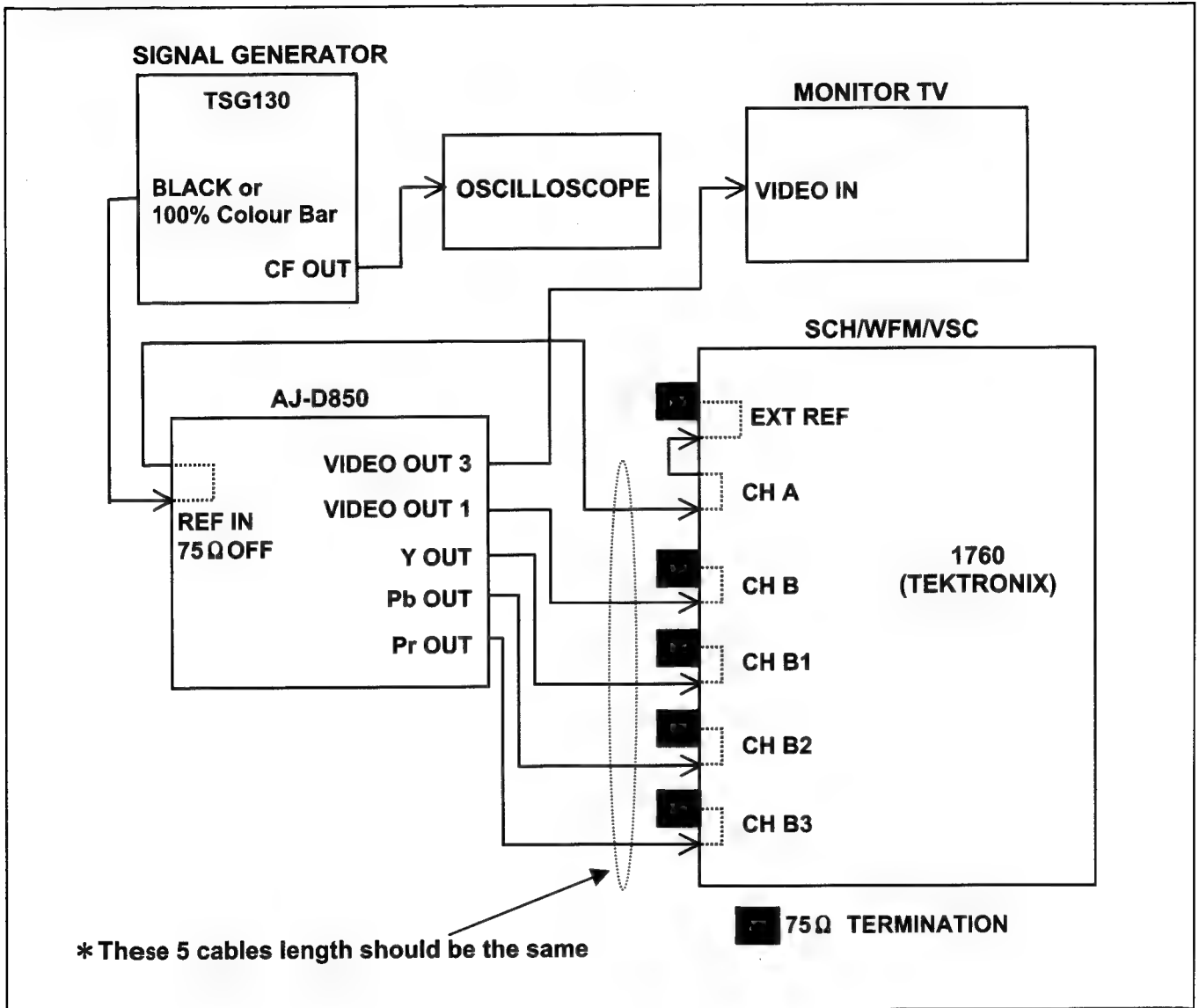
P.C.B.	REC PB (F5)
SPEC.	$0.0V \pm 0.2V$
TEST	TP113
ADJ.	VC1
INPUT	-----
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Adjust VC170 so that the DC level is in specification.

7. Video Out P. C. Board (F4) [FOR NTSC ONLY]

Please warm up the VTR about 10 minute before adjustment.

CONNECTION



7-1. DA Reference Voltage Adjustment

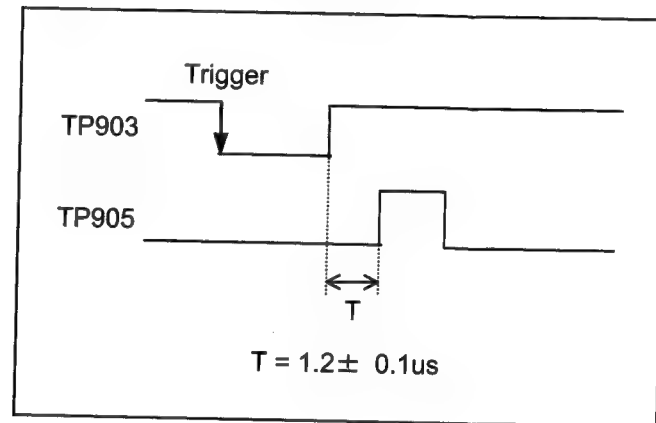
P.C.B.	V_OUT (F4)
SPEC.	$3.9V \pm 0.05VDC$
TEST	TP300 (H-3)
ADJ.	VR300 (G-1)
INPUT	REF IN: Composite 75% color bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

Adjust VR300 so that the voltage is $3.9V \pm 0.05VDC$.

7-2. Sampling Position Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$1.2 \pm 0.1\mu s$
TEST	TP903 (D-1), TP905 (C-2)
ADJ.	VR900 (C-1)
INPUT	REF IN: Composite 75% color bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

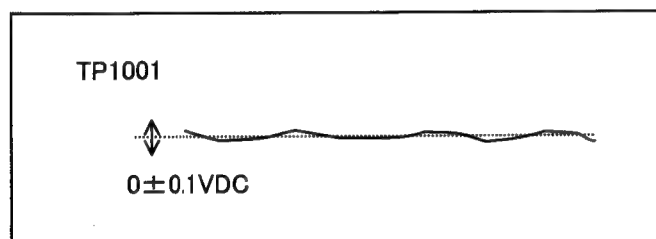
Adjust VR900 so that the phase difference is $1.2 \pm 0.1\mu s$ between the rising edge at TP903 and the rising edge at TP905 as shown in figure.



7-3. PLL Center Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0V \pm 0.1VDC$
TEST	TP1001 (D-1)
ADJ.	VC1000 (D-2)
INPUT	REF IN: Composite 75% color bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

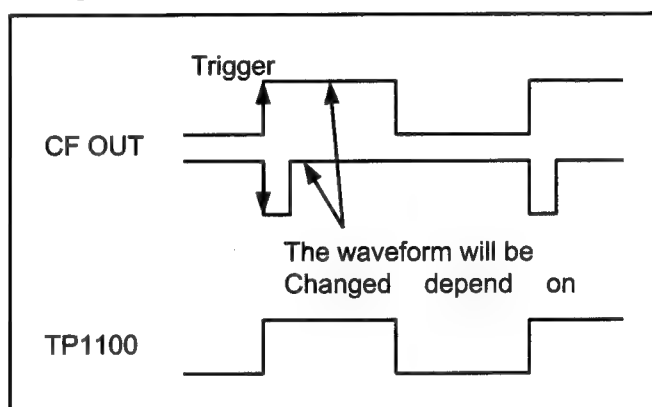
1. Adjust VC1000 so that the voltage is $0V \pm 0.1VDC$.



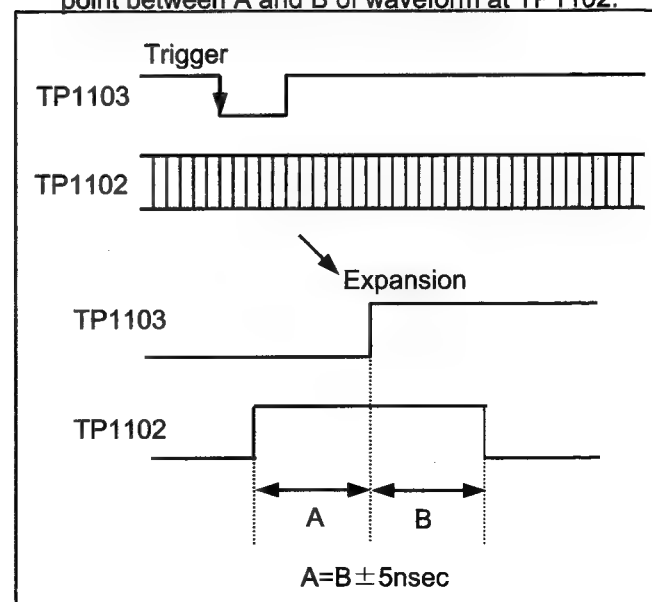
7-4. REF CF Detection Adjustment

P.C.B.	V_OUT (F4)
SPEC.	See Figure, $A = B \pm 5\%$
TEST	TP1100 (C-2), CF Out of Signal SG TP1102 (C-2), TP1103 (C-2)
ADJ.	VR901 (C-1)
INPUT	REF IN: Composite 75% Color Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Connect the oscilloscope CH1 to the CF output of composite signal generator and CH2 to TP1100.
2. Adjust VR901 so that the phase is synchronized between CF pulses and TP1100 as shown in figure.



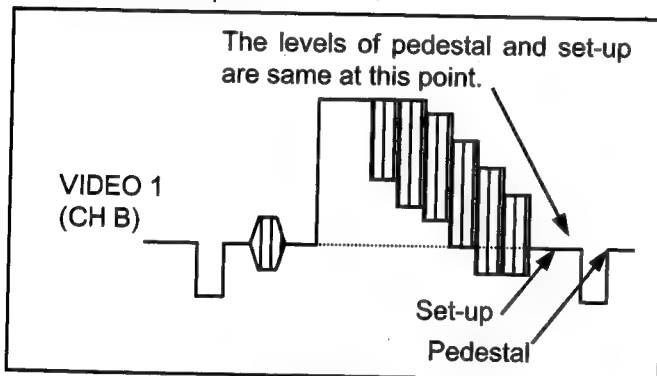
3. Connect the oscilloscope CH1 to TP1103 and CH2 to TP1102.
4. Expand (delay) the rising edge of TP1103.
5. Slowly and slightly rotate VR901 so that the rising edge of TP1103 is positioned at the center of cross point between A and B of waveform at TP1102.



7-5. Composite Set-up Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Set-up Level = Pedestal Level $\pm 1RE$
TEST	VIDEO OUT 1
ADJ.	VR802 (J-2)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

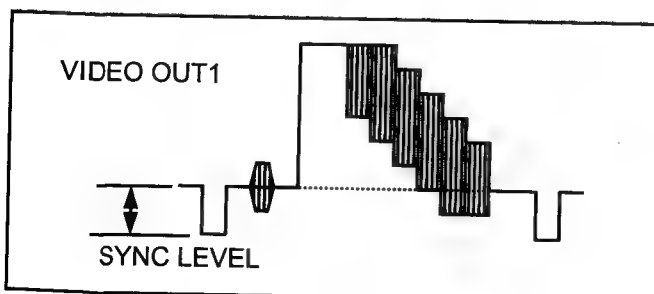
1. Open the VIDEO ADJUST menu on Service Menu and set item "D08: V SETUP" to ON.(Only AJ-D450)
2. Set the item "613:V IN SETUP" and "614:V OUT SETUP" to "THRU" on SET UP menu.(Only AJ-D450)
3. Adjust VR802 so that the set-up level is the same level as the pedestal level.



7-6. Sync Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	40IRE $\pm 1\%$
TEST	VIDEO OUT 1
ADJ.	VR400 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

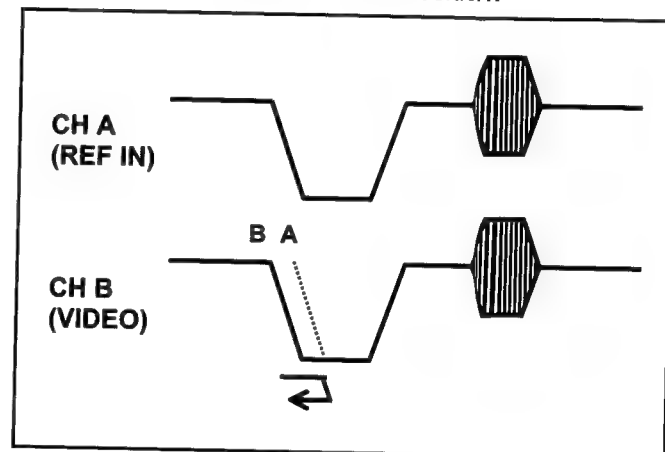
1. Adjust VR400 so that the Sync Level is 40IRE $\pm 1\%$.



7-7. H Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Refer to below description
TEST	REF IN (CHA), VIDEO OUT 1 (CHB)
ADJ.	VR1100 (B-1)
INPUT	REF IN: Composite 75% Color Bar
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

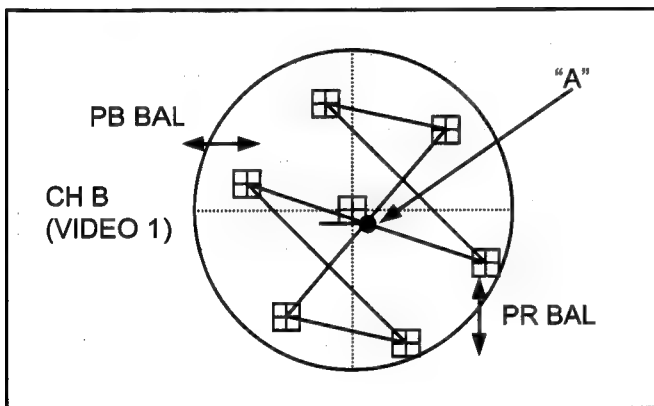
1. Set WFM in the EXT-REF MODE.
2. Adjust VR1100 so that the phase synchronized between REF IN (CHA) and VIDEO OUT 1 (CHB). Please follow the below indicated procedure.
 - (1). Adjust VR1100 so that the H Phase of V OUT is at A Position.
 - (2). After the item (1), adjust VR1100 so that the H Phase of V OUT is at A Position.



7-8. Carrier Balance Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Cross point "A" at the center of scope.
TEST	VIDEO OUT 1
ADJ.	VR505 (I-1), VR506 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Vector Scope

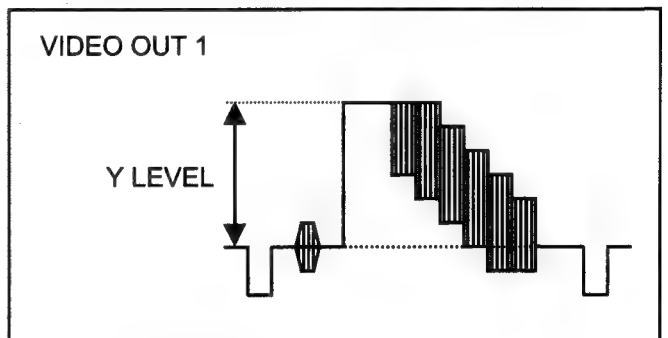
1. Adjust VR505 (PB BAL) and VR506 (PR BAL) so that the cross point "A" is positioned at the center of the vector scope.



7-9. Composite Y Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	100IRE \pm 1%
TEST	VIDEO OUT 1
ADJ.	VR800 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

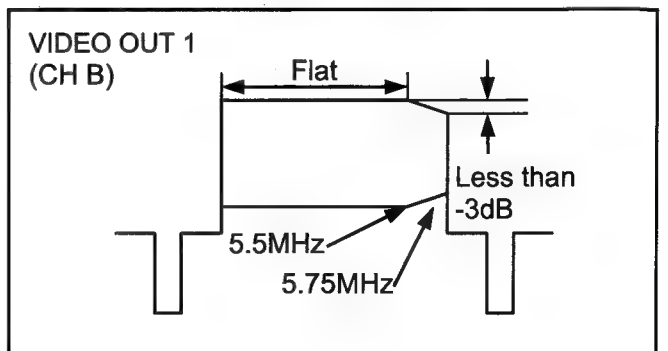
1. Adjust VR800 so that the Y level is 100IRE \pm 1%.



7-10. Composite Y Frequency Response Adjustment

P.C.B.	V_OUT (F4)
SPEC.	5.5MHz = Less than -3dB
TEST	VIDEO OUT 1
ADJ.	VR801 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (H-Sweep portion)
M.EQ	Waveform Monitor

1. Adjust VR801 so that the frequency response becomes flat.
 - a) The level of 5.5MHz portion is less than -3dB.
 - b) The middle frequency is flat.

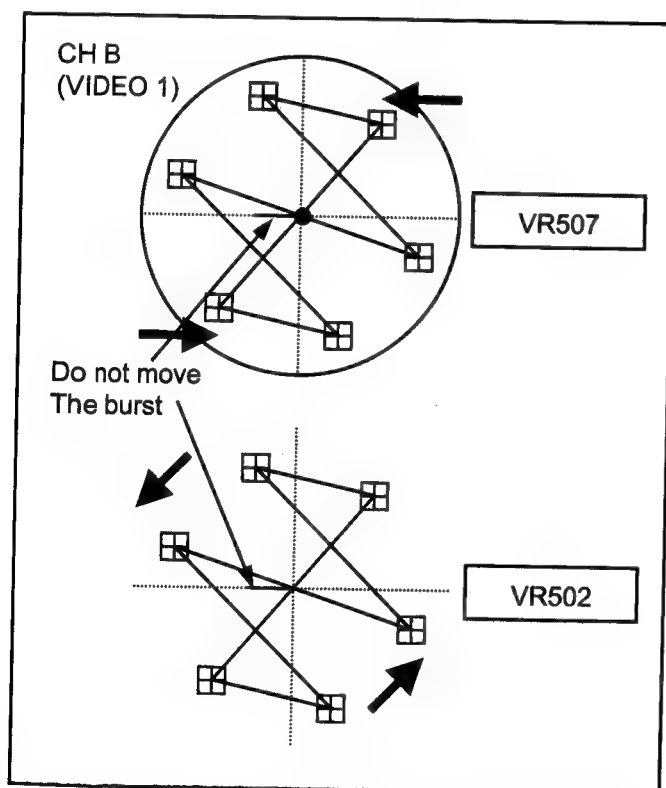
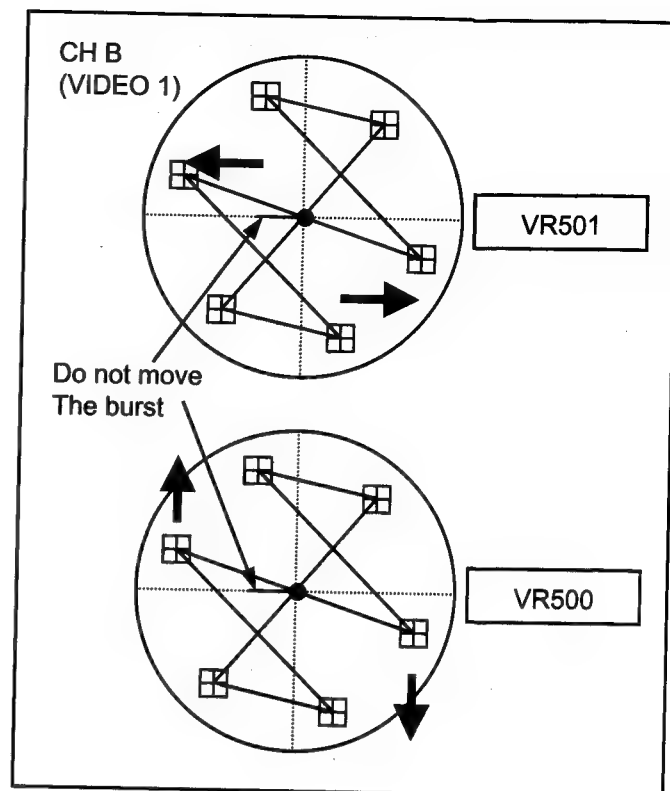


7-11. Vector Adjustment

P.C.B.	V_OUT (F4)
SPEC.	All vectors are in the Inner Boxes
TEST	VIDEO OUT 1
ADJ.	VR500 (H-1), VR502 (H-1) VR501 (H-1), VR507 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Vector Scope

1. Set the burst position on the Vector Scope at correct position.
2. Adjust the following VR's so that the color bar's each vector points are in the square mark on the vector scope.

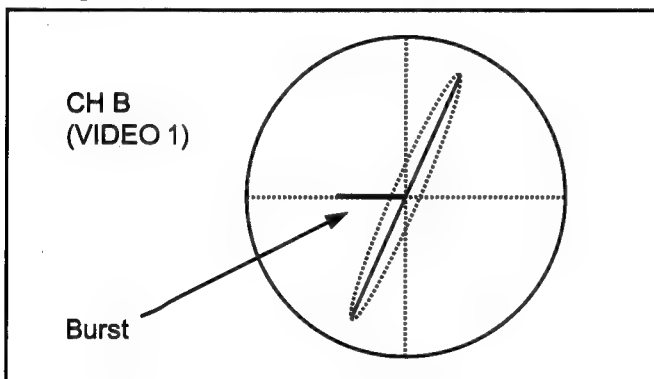
VR507 : Quad Phase
 VR502 : Hue Phase
 VR501 : Encode PB Level
 VR500 : Encode PR Level



7-12. Composite Pb/Pr Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$
TEST	VIDEO OUT 1
ADJ.	VR307 (F-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (Bowtie portion)
M.EQ	Vector Scope

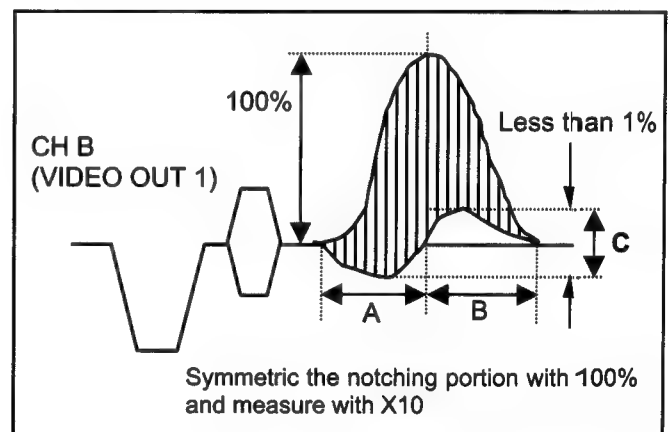
1. Adjust VR307 so that the signal on the vector scope becomes 1 straight lines (X) as shown in figure.



7-13. Composite Y/C Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$ (C = less than 1%)
TEST	VIDEO OUT 1
ADJ.	VR803 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (Pulse Bar portion)
M.EQ	Waveform Monitor

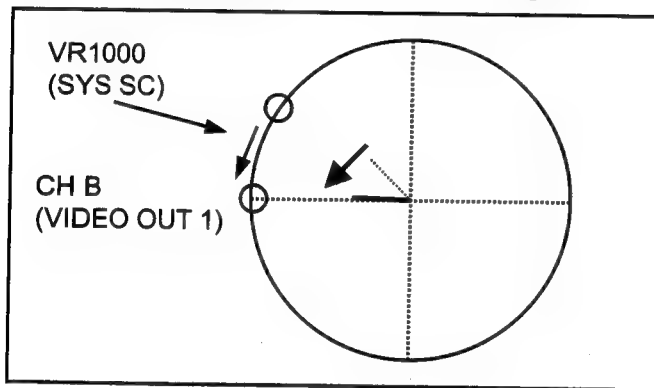
1. Adjust VR803 so that the portion A and B are become symmetric left and right and level of portion C less than 1% against level of waveform 100% as shown in figure.
2. When performing this adjustment, the level of waveform may be changed. Therefore, level of waveform is adjusted by Chroma VR on the front panel during this adjustment.
3. After finish this adjustment set the Chroma VR to preset position.
4. After completion of this adjustment, "7-14. Sub-Carrier Phase Adjustment" should be performed.



7-14. Sub-Carrier Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	0 ± 1 degree
TEST	VIDEO OUT 1 (CHB), REF IN (CHA)
ADJ.	VR1000 (B-1)
INPUT	REF IN: Composite 75% Color Bar
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	SCH Meter

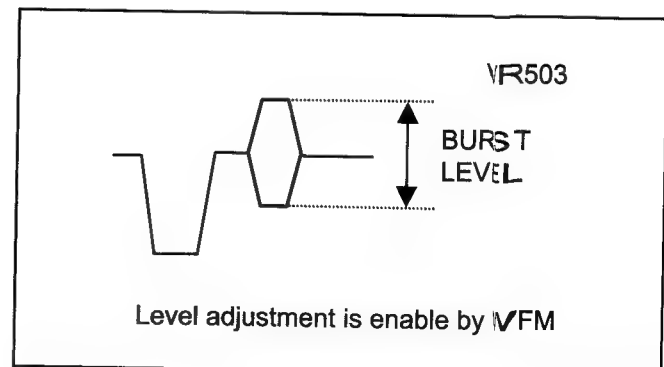
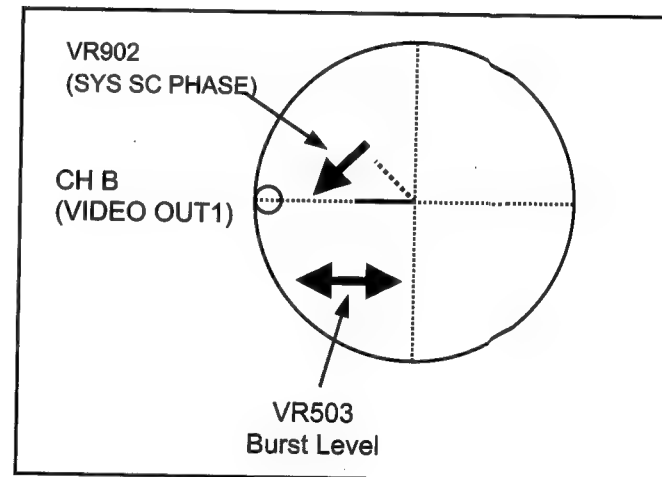
1. Adjust VR1000 so that the SCH of VIDEO OUT(CHB) is same as EXT-REF-IN(CHA), then SCH phase should be become 0 ± 1 degree.



7-15. Burst Adjustment

P.C.B.	V_OUT (F4)
SPEC.	PHASE: 0 ± 1 degree LEVEL: 40 ± 0.4 IRE
TEST	VIDEO OUT 1
ADJ.	VR902 (B-1), VR503 (H-1)
INPUT	REF IN: Composite 75% Color Bar
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	SCH Meter

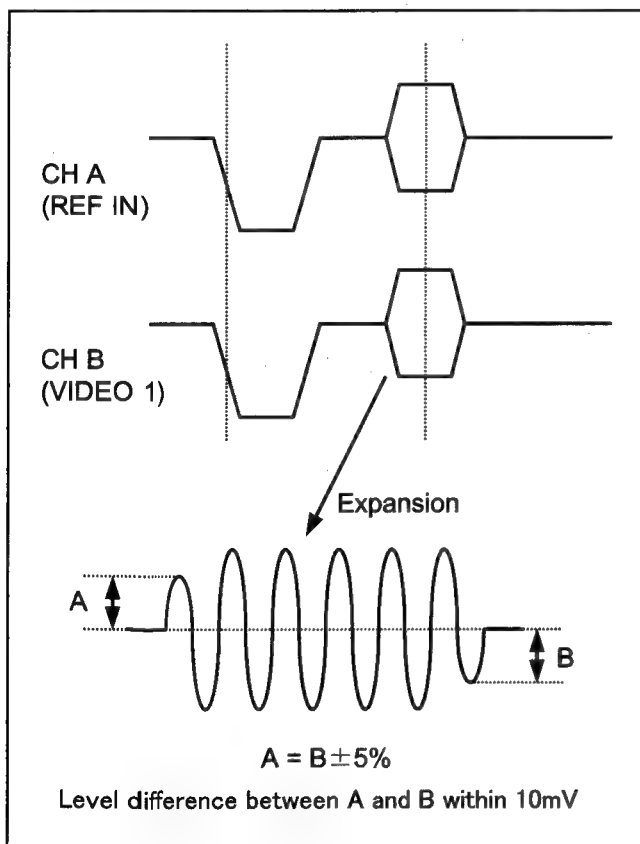
1. Adjust VR902 while changing the channels A and B of the SCH meter alternately so that the SCH is 0 degree.
2. Adjust VR503 while changing the channels A and B of the SCH meter alternately so that the burst level and burst phase are become same between VIDEO 1 OUT(CHB) and REF(CHA), then burst level is should be become 40 ± 0.4 IRE.



7-16. Burst Position Adjustment

P.C.B.	V_OUT (F4)
SPEC.	A = B ± 5% (Level difference between A and B within 10mV)
TEST	VIDEO OUT 1(CHB), REF IN(CHA)
ADJ.	VR1102 (B-1)
INPUT	REF IN: Composite 75% Color Bar
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

1. Adjust VR1102 while changing the channels A and B of the vector scope alternately so that the center of the burst of the reference and VIDEO OUT 1 are phase synchronized and level difference between A and B portion in specification.

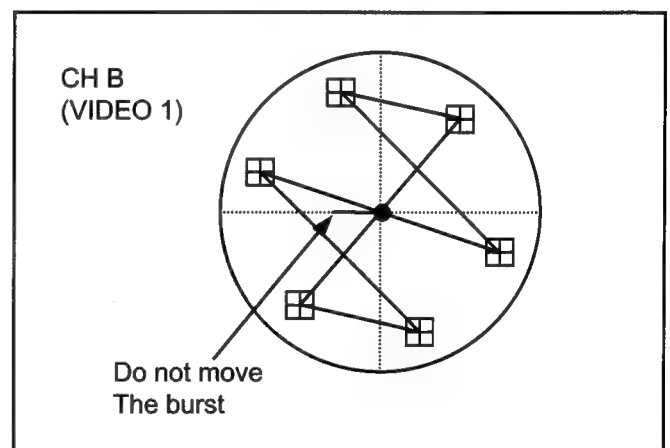


7-17. Confirmation of Vector

P.C.B.	V_OUT (F4)
SPEC.	All vectors are in the Inner Boxes
TEST	VIDEO OUT 1
ADJ.	VR502 (H-1), VR501 (H-1) VR500 (H-1), VR507 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Vector Scope

1. Set the burst position on the Vector Scope at correct position.
2. Confirm that the color bar's each vector points are in the square mark on the vector scope.
3. If out of specification, adjust the following VR's so that the color bar's each vector points are in the square mark on the vector scope.(Refer to item 7-11. Vector Adjustment).

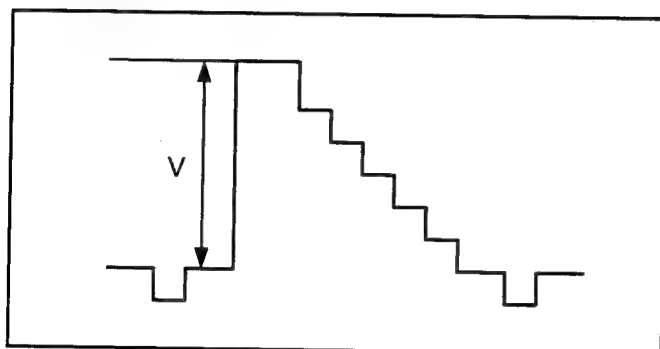
VR507 : Quad Phase
 VR502 : Hue Phase
 VR501 : Encode PB Level
 VR500 : Encode PR Level



7-18. Component Y Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	COMPONENT Y OUT
ADJ.	VR301 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

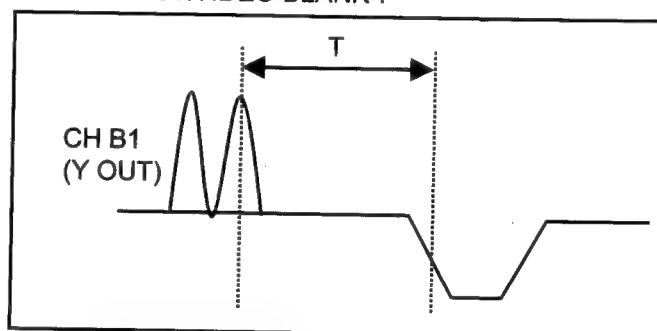
1. Set the SW400 to M II side on V OUT P.C.Board..
2. Adjust VR301 so that the V level is $700\text{mV} \pm 7\text{mV}$.



7-19. Video Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$T = 1.26 \pm 0.02\text{usec}$
TEST	Y OUT
ADJ.	VR1050 (A-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (Area Marker portion)
M.EQ	Waveform Monitor

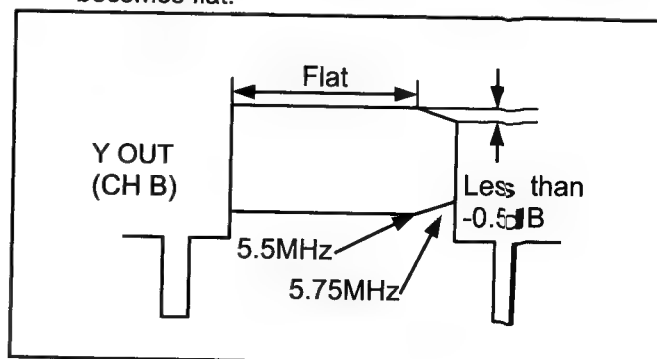
1. Open the Video Adjust menu on Service menu and set item "D01:VIDEO BLANK" to OFF position.
2. Adjust VR1050 so that the timing T is within specification.
3. After finish this adjustment, set to ON position of item "D01:VIDEO BLANK".



7-20. Component Y Frequency Response Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$5.5\text{MHz} = \text{Less than } -0.5\text{dB}$
TEST	COMPONENT Y OUT
ADJ.	VR304 (F-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (H Sweep portion)
M.EQ	Waveform Monitor

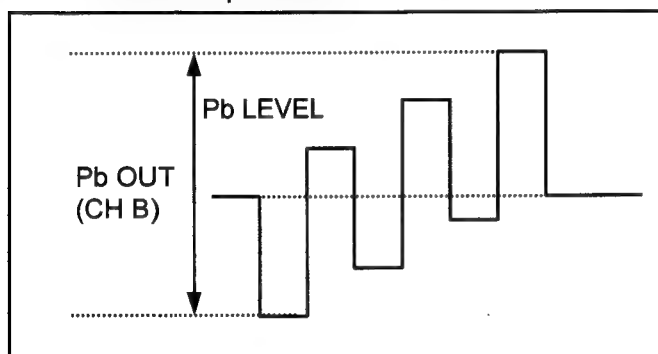
1. Adjust VR304 so that the frequency response becomes flat.



7-21. Component Pb Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	525mV \pm 5mV
TEST	COMPONENT PB OUT
ADJ.	VR306 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

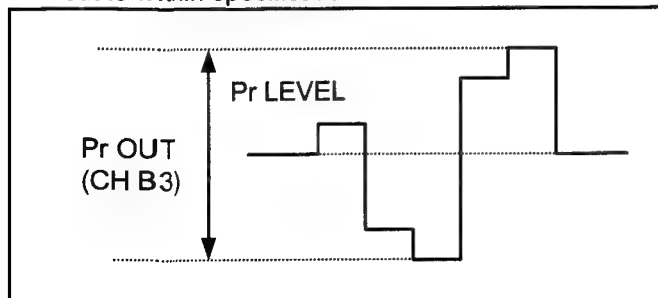
1. Set the SW400 to M II side on V OUT P.C.Board..
2. Adjust VR306 so that the Pb level of component out is within specification.



7-22. Component Pr Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	525mV \pm 5mV
TEST	COMPONENT Pr OUT
ADJ.	VR305 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

1. Set the SW400 to M II side on V OUT P.C.Board..
2. Adjust VR305 so that the Pr level of component out is within specification.

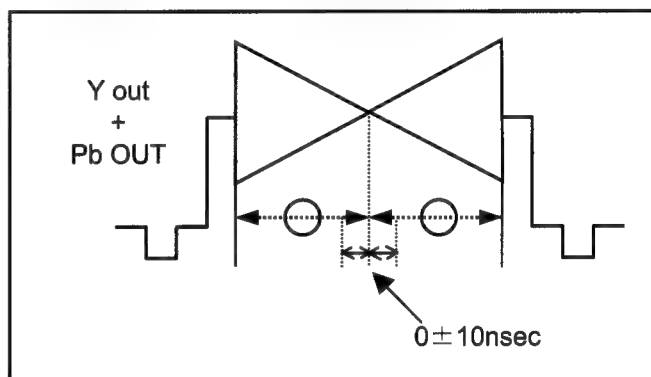


7-23. Component Y/Pb Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	0 \pm 10nsec
TEST	COMPONENT Y OUT, PB OUT
ADJ.	VR303 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (Bowtie portion)
M.EQ	Waveform Monitor

1. Set the waveform monitor in the YC timing measuring mode (CH B1 + CH B2).
2. Adjust VR303 so that the cross point of the envelope is at the center.

Note: Incase of WFM monitor does not have Y-Pb timing adjustment mode, if the oscilloscope have "ADD" and "INVERT" switch, please use those switch for make below waveform.

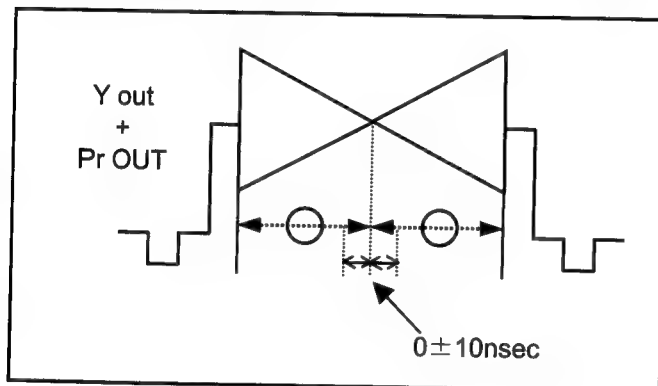


7-24. Component Y/Pr Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$
TEST	COMPONENT Y OUT, Pr OUT
ADJ.	VR302 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (Bowtie portion)
M.EQ	Waveform Monitor

1. Set the waveform monitor in the YC timing measuring mode (CH B1 + CH B3).
2. Adjust VR302 so that the cross point of the envelope is at the center.

Note: Incase of WFM monitor does not have Y-Pb timing adjustment mode, if the oscilloscope have "ADD" and "INVERT" switch, please use those switch for make below waveform.

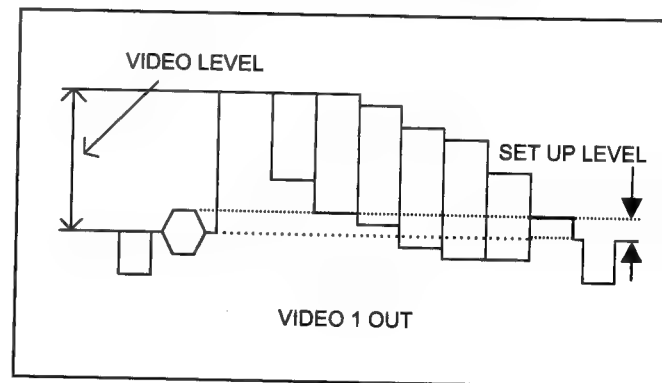


7-25. Composite Set up Adjustment (Set up ADD mode)

P.C.B.	V_OUT (F4)
SPEC.	Set up level = $7.5 \pm 0.5\text{IRE}$
TEST	VIDEO 1 OUT
ADJ.	VR805 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

1. Set the item "614: VOUT SET UP" to "ADD" on Set-up menu.
2. Adjust VR805 so that the Set-up level is $7.5 \pm 0.5\text{IRE}$.

NOTE: Signal have carrier leak and noise, therefore set Y-filter mode on WFM monitor.

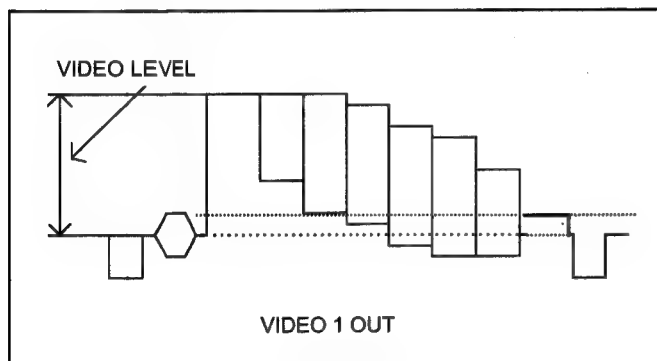


7-26. Composite Video Level Adj. (Set up ADD mode)

P.C.B.	V_OUT (F4)
SPEC.	Video level = 100 ± 1 IRE
TEST	VIDEO 1 OUT
ADJ.	VR804 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Waveform Monitor

1. Set the item "614: VOUT SET UP" to "ADD" on Set-up menu.
2. Adjust VR804 so that the Video level is 100 ± 1 IRE.

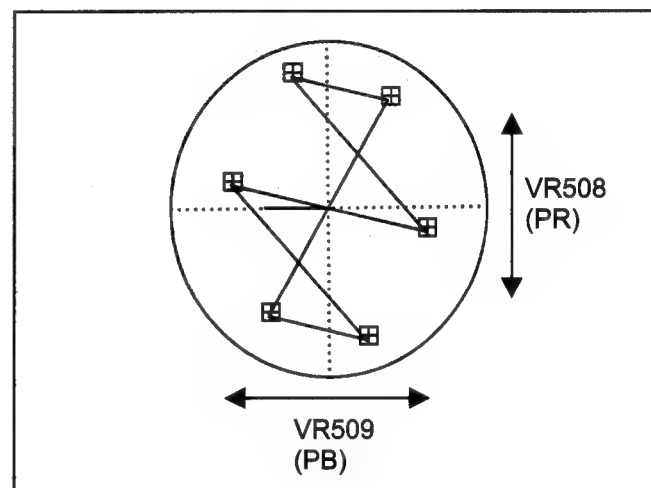
NOTE: Signal have carrier leak and noise, therefore set Y-filter mode on WFM monitor.



7-27. Vector Adjustment (Set up ADD mode)

P.C.B.	V_OUT (F4)
SPEC.	All vectors are in the Inner Boxes
TEST	VIDEO 1 OUT
ADJ.	VR508 (I-1), VR509 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (75% Color Bar portion)
M.EQ	Vector Scope

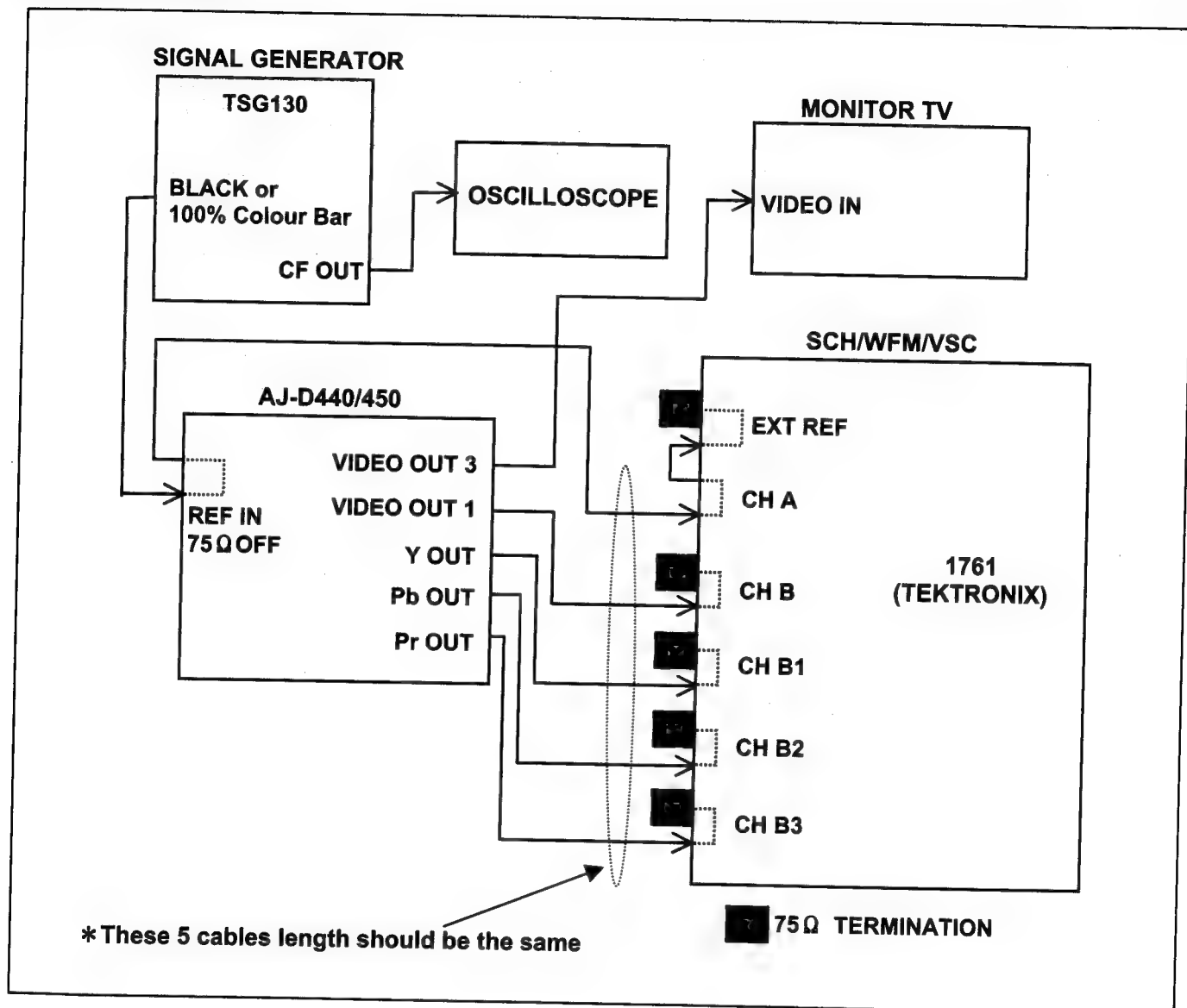
1. Set the item "614: VOUT SET UP" to "ADD" on Set-up menu.
2. Adjust VR508(PR) and VR509(PB) so that the each vector points are in the square mark on the vector scope.



7. Video Out P. C. Board (F4) [FOR PAL ONLY]

Please warm up the VTR about 10 minute before adjustment.

CONNECTION



7-1. DA Reference Voltage Adjustment

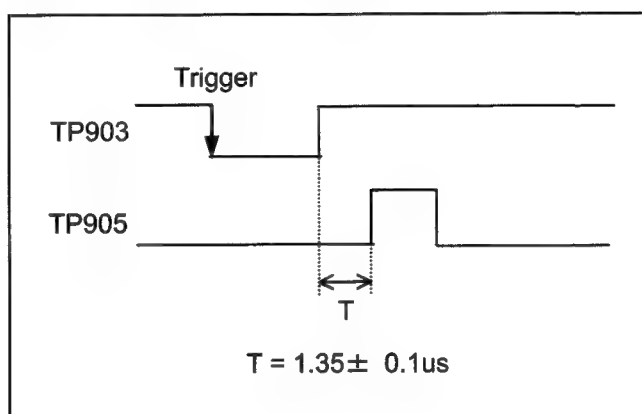
P.C.B.	V_OUT (F4)
SPEC.	$3.9V \pm 0.05VDC$
TEST	TP300 (H-3)
ADJ.	VR300 (G-1)
INPUT	REF IN: Composite 100% colour bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

Adjust VR300 so that the voltage is $3.9V \pm 0.05VDC$.

7-2. Sampling Position Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$1.35 \pm 0.05\mu s$
TEST	TP903 (D-1), TP905 (C-2)
ADJ.	VR900 (C-1)
INPUT	REF IN: Composite 100% colour bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

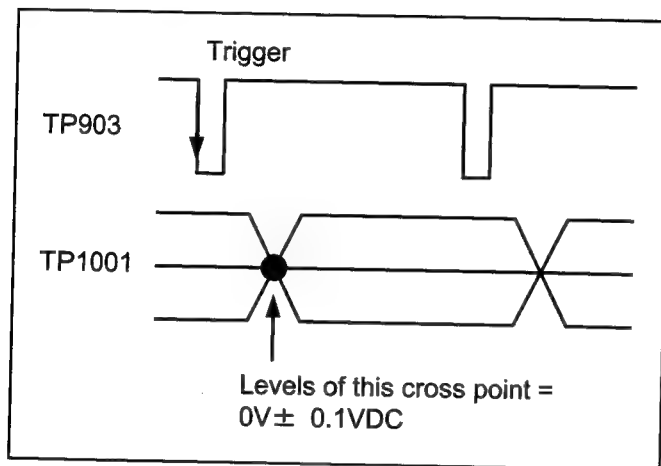
Adjust VR900 so that the phase difference is $1.35 \pm 0.05\mu s$ between the rising edge at TP903 and the rising edge at TP905 as shown in figure.



7-3. PLL Center Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0V \pm 0.1VDC$
TEST	TP903 (D-1), TP1001 (D-1)
ADJ.	VC1000 (D-2)
INPUT	REF IN: Composite 100% colour bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

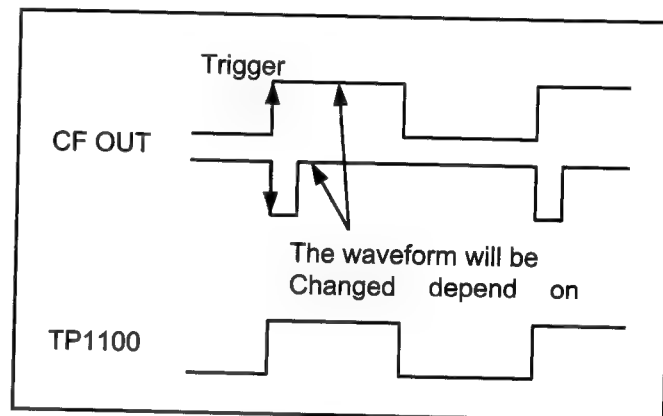
1. Adjust VC1000 so that the voltage is $0V \pm 0.1VDC$.



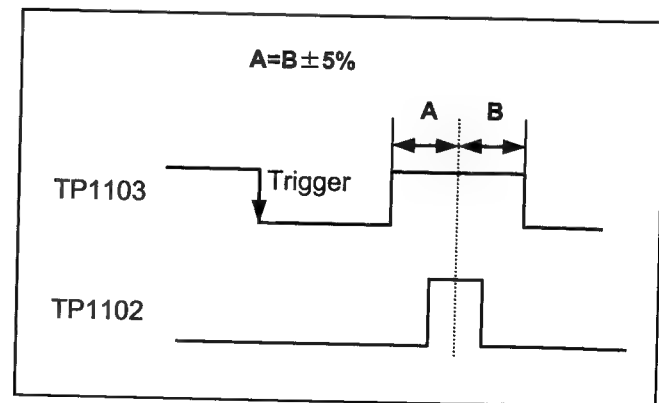
7-4. REF CF Detection Adjustment

P.C.B.	V_OUT (F4)
SPEC.	See Figure, $A = B \pm 5\%$
TEST	TP1100 (C-2), CF Out of Signal SG TP1102 (C-2), TP1103 (C-2)
ADJ.	VR901 (C-1)
INPUT	REF IN: Composite 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Connect the oscilloscope CH1 to the CF output of composite signal generator and CH2 to TP1100.
2. Adjust VR901 so that the phase is synchronized between CF pulses and TP1100 as shown in figure.



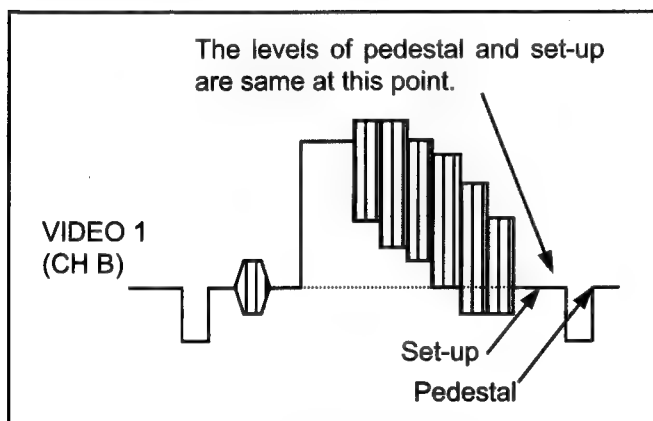
3. Connect the oscilloscope CH1 to TP1103 and CH2 to TP1102.
4. Expand (delay) the rising edge of TP1103.
5. Slowly and slightly rotate VR901 so that the high period of TP1103 is positioned at the center of stable waveform at TP1102.



7-5. Composite Set-up Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Set-up Level = Pedestal Level $\pm 7\text{mV}$
TEST	VIDEO OUT 1
ADJ.	VR802 (J-2)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Waveform Monitor

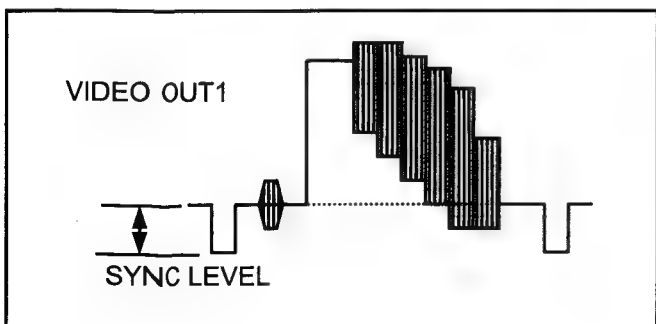
1. Adjust VR802 so that the set-up level is the same level as the pedestal level.



7-6. Sync Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$300\text{mV} \pm 3\text{mV}$
TEST	VIDEO OUT 1
ADJ.	VR400 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Waveform Monitor

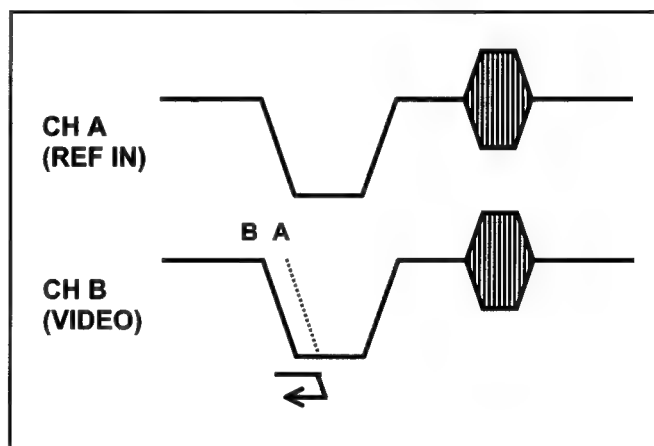
1. Adjust VR400 so that the Sync Level is $300\text{mV} \pm 3\text{mV}$.



7-7. H Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Refer to below description
TEST	REF IN (CHA), VIDEO OUT 1 (CHB)
ADJ.	VR1100 (B-1)
INPUT	REF IN: Composite 100% Color Bar
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Waveform Monitor

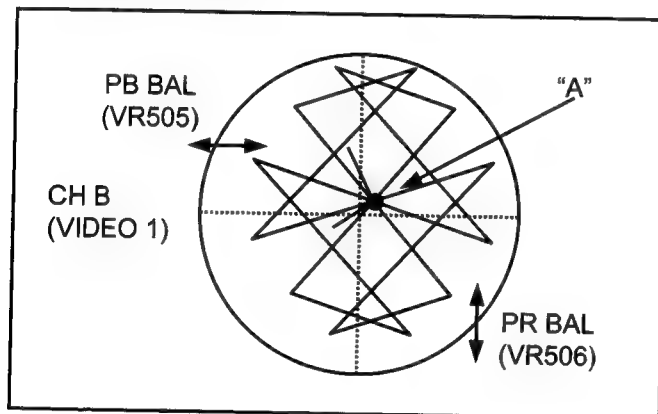
1. Set WFM in the EXT-REF MODE.
2. Adjust VR1100 so that the phase synchronized between REF IN (CHA) and VIDEO OUT 1 (CHB). Please follow the below indicated procedure.
 - (1). Adjust VR1100 so that the H Phase of V OUT is at A Position.
 - (2). After the item (1), adjust VR1100 so that the H Phase of V OUT is at A Position.



7-8. Carrier Balance Adjustment

P.C.B.	V_OUT (F4)
SPEC.	Cross point "A" at the center of scope.
TEST	VIDEO OUT 1
ADJ.	VR505 (I-1), VR506 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Vector Scope

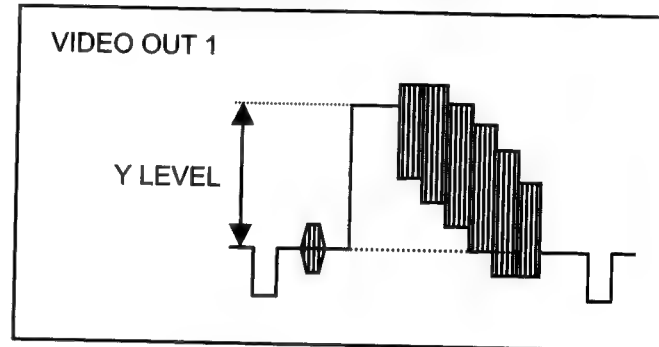
- Adjust VR505 (PB BAL) and VR506 (PR BAL) so that the cross point "A" is positioned at the center of the vector scope.



7-9. Composite Y Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	700mV \pm 5mV
TEST	VIDEO OUT 1
ADJ.	VR800 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Waveform Monitor

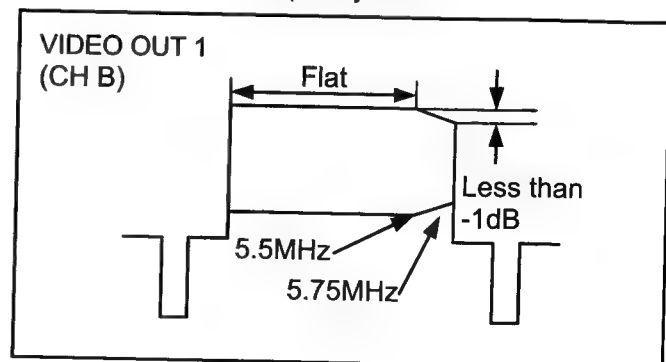
- Adjust VR800 so that the Y level is 700mV \pm 5mV.



7-10. Composite Y Frequency Response Adjustment

P.C.B.	V_OUT (F4)
SPEC.	5.5MHz = Less than -1dB
TEST	VIDEO OUT 1
ADJ.	VR801 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (H-Sweep portion)
M.EQ	Waveform Monitor

- Adjust VR801 so that the frequency response becomes flat.
 - The level of 5.5MHz portion is less than -1dB.
 - The middle frequency is flat.

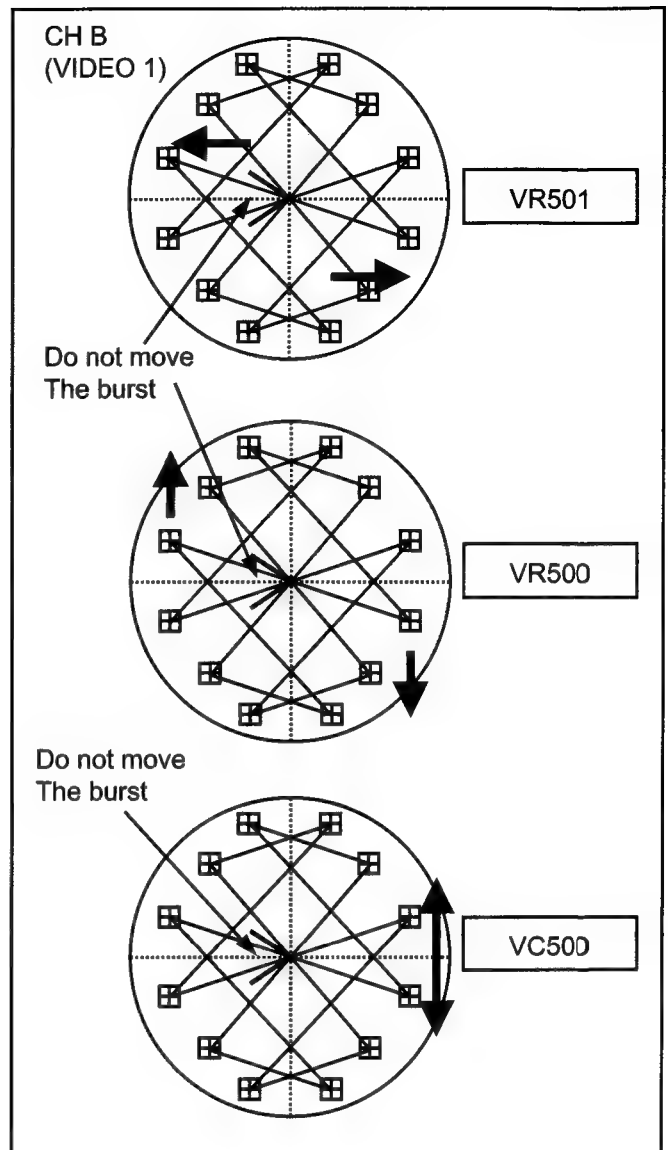
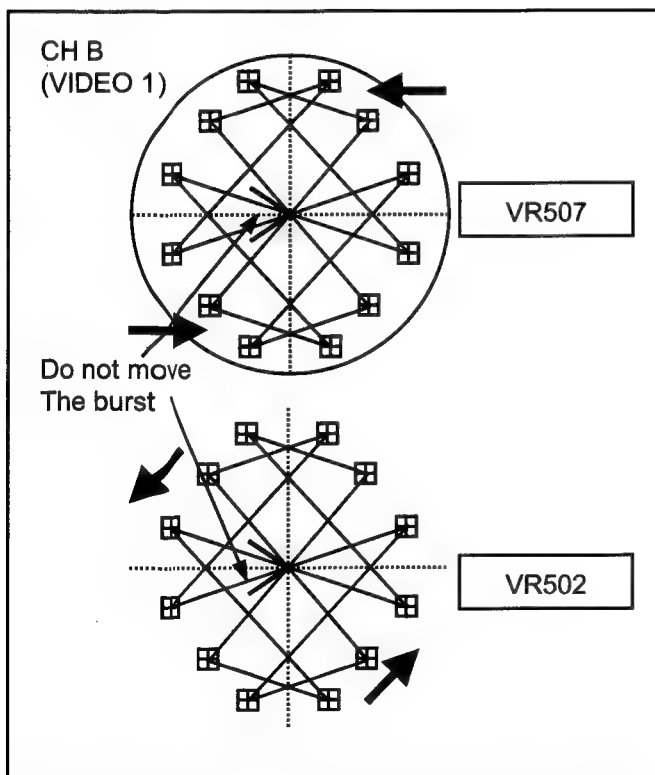


7-11. Vector Adjustment

P.C.B.	V_OUT (F4)
SPEC.	All vectors are in the Inner Boxes
TEST	VIDEO OUT 1
ADJ.	VR507 (I-1), VR502 (H-1), VR501 (H-1) VR500 (H-1), VC500 (I-3)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Vector Scope

1. Set the burst position on the Vector Scope at correct position.
2. Adjust the following VR's so that the colour bar's each vector points are in the square mark on the vector scope.

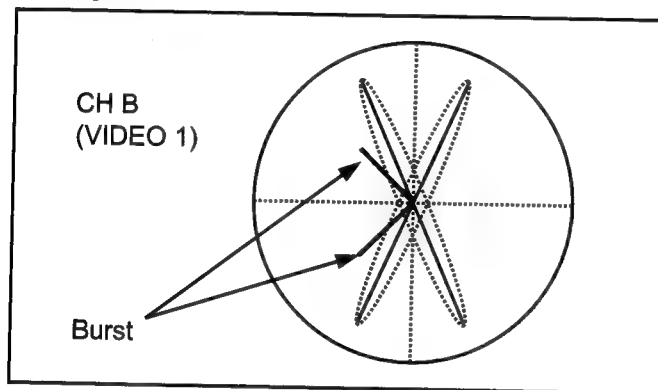
VR507 : Quad Phase
 VR502 : Hue Phase
 VR501 : Encode PB Level
 VR500 : Encode PR Level
 VC500 : PAL Phase



7-12. Composite Pb/Pr Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$
TEST	VIDEO OUT 1
ADJ.	VR307 (F-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (Bowtie portion)
M.EQ	Vector Scope

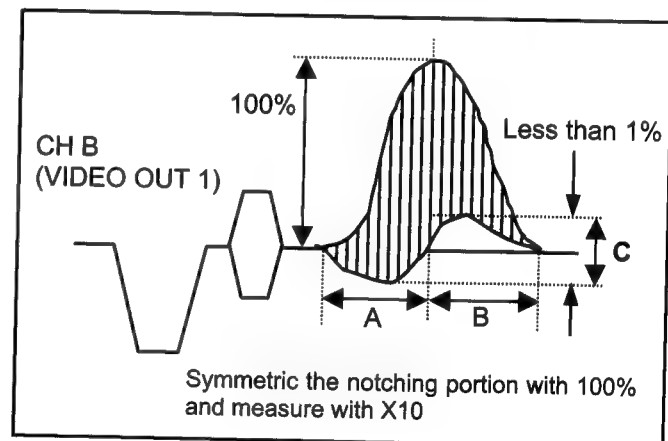
1. Adjust VR307 so that the signal on the vector scope becomes 2 straight lines (X) as shown in figure.



7-13. Composite Y/C Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$ (C = less than 1%)
TEST	VIDEO OUT 1
ADJ.	VR803 (I-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (Pulse Bar portion)
M.EQ	Waveform Monitor

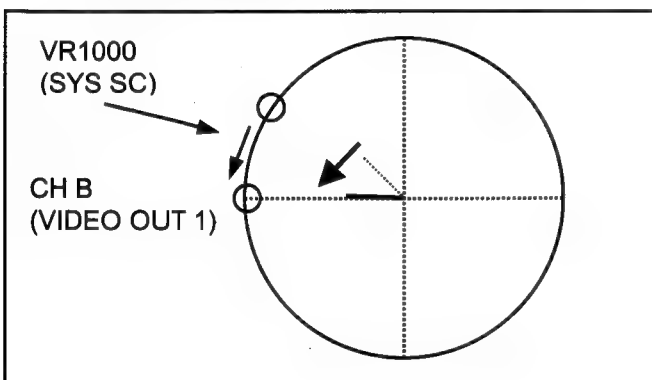
1. Adjust VR803 so that the portion A and B are become symmetric left and right and level of portion C less than 1% against level of waveform 100% as shown in figure.
2. When performing this adjustment, the level of waveform may be changed. Therefore, level of waveform is adjusted by Chroma VR on the front panel during this adjustment.
3. After finish this adjustment set the Chroma VR to preset position.
4. After completion of this adjustment, "7-14. Sub-Carrier Phase Adjustment" should be performed.



7-14. Sub-Carrier Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	0 ± 1 degree
TEST	VIDEO OUT 1 (CHB), REF IN (CHA)
ADJ.	VR1000 (B-1)
INPUT	REF IN: Composite 100% Colour Bar
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	SCH Meter

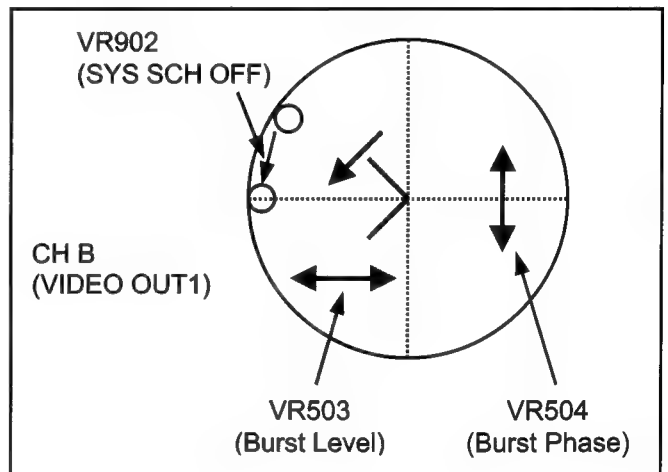
1. Adjust VR1000 so that the SCH of VIDEO OUT(CHB) is same as EXT-REF-IN(CHA), then SCH phase should be become 0 ± 1 degree.



7-15. Burst Adjustment

P.C.B.	V_OUT (F4)
SPEC.	SCH PHASE: 0 ± 3 degree BURST LEVEL: $300\text{mV} \pm 3\text{mV}$
TEST	VIDEO OUT 1 (CHB), REF IN (CHA)
ADJ.	VR902 (B-1), VR503 (H-1), VR504 (H-1)
INPUT	REF IN: Composite 100% Colour Bar
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	SCH Meter

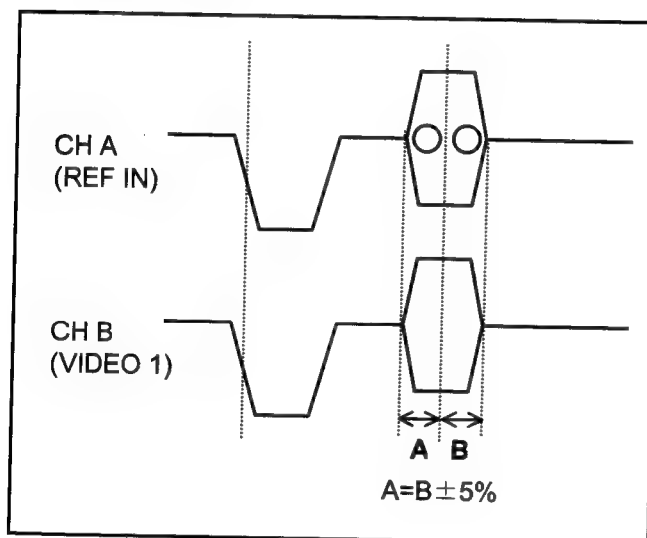
1. Adjust VR902 while changing the channels A and B of the SCH meter alternately so that the SCH is 0 ± 5 degree.
2. Adjust VR503 and VR504 while changing the channels A and B of the SCH meter alternately so that the burst level and burst phase are become same between VIDEO OUT 1 (CHB) and REF(CHA).
3. Adjust VR503 so that the burst level is become $300\text{mV} \pm 3\text{mV}$ (measure by WFM).



7-16. Burst Position Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$A = B \pm 5\%$
TEST	VIDEO OUT 1(CHB), REF IN(CHA)
ADJ.	VR1102 (B-1)
INPUT	REF IN: Composite 100% Colour Bar
MODE	PLAY
TAPE	VFM3680KM (100% Colour Bar portion)
M.EQ	Waveform Monitor

1. Adjust VR1102 while changing the channels A and B of the waveform monitor alternately so that the center of the burst of the reference and VIDEO OUT 1 are phase synchronized and phase difference between A and B portion in specification.

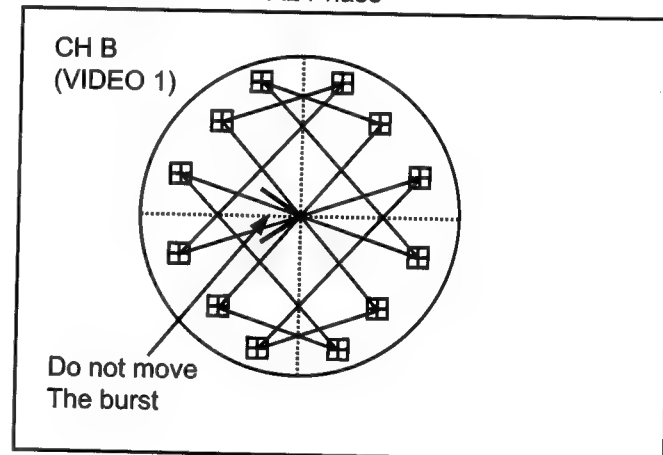


7-17. Confirmation of Vector

P.C.B.	V_OUT (F4)
SPEC.	All vectors are in the Inner Boxes
TEST	VIDEO OUT 1
ADJ.	VR502 (H-1), VR501 (H-1) VR500 (H-1), VR507 (I-1), VC500 (I-3)
INPUT	-----
MODE	PLAY
TAPE	VFM3580KM (100% Colour Bar portion)
M.EQ	Vector Scope

1. Set the burst position on the Vector Scope at correct position.
2. Confirm that the colour bar's each vector points are in the square mark on the vector scope.
3. If out of specification, adjust the following VR's so that the colour bar's each vector points are in the square mark on the vector scope.(Refer to item 7-11. Vector Adjustment).

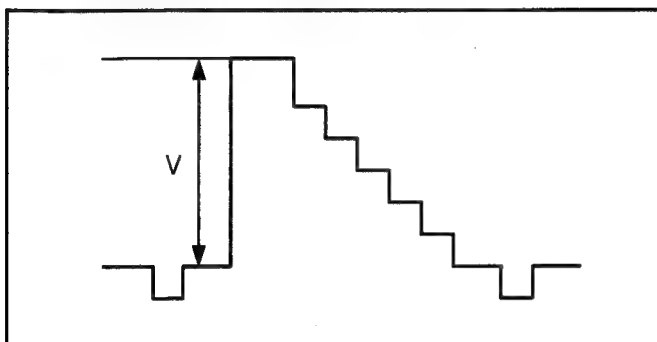
VR507 : Quad Phase
 VR502 : Hue Phase
 VR501 : Encode PB Level
 VR500 : Encode PR Level
 VC500 : PAL Phase



7-18. Component Y Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	COMPONENT Y OUT
ADJ.	VR301 (G-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Color Bar portion)
M.EQ	Waveform Monitor

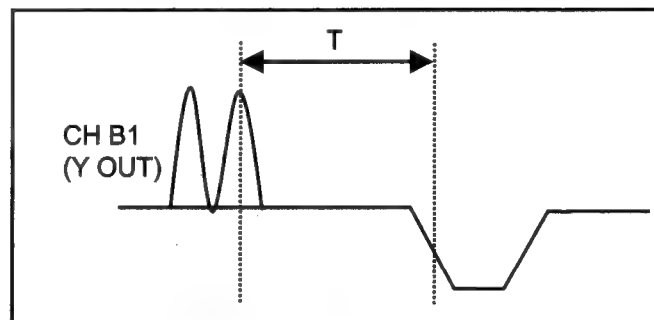
1. Adjust VR301 so that the V level is $700\text{mV} \pm 7\text{mV}$.



7-19. Video Phase Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$T = 0.96 \pm 0.02\text{usec}$
TEST	Y OUT
ADJ.	VR1050 (A-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (Area Marker portion)
M.EQ	Waveform Monitor

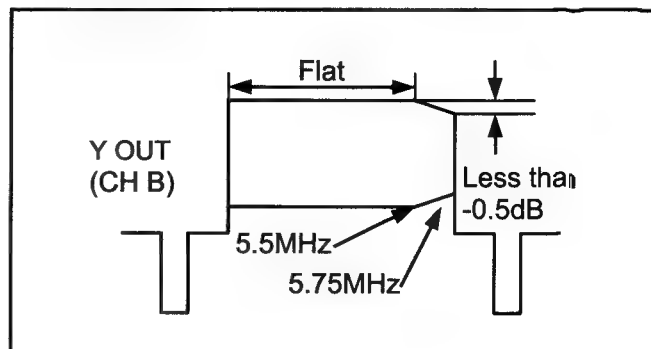
1. Open the Video Adjust menu on Service menu and set item "D01:VIDEO BLANK" to OFF position.
2. Adjust VR1050 so that the timing T is within specification.
3. After finish this adjustment, set to ON position of item "D01:VIDEO BLANK".



7-20. Component Y Frequency Response Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$5.5\text{MHz} = \text{Less than } -0.5\text{dB}$
TEST	COMPONENT Y OUT
ADJ.	VR304 (F-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (H Sweep portion)
M.EQ	Waveform Monitor

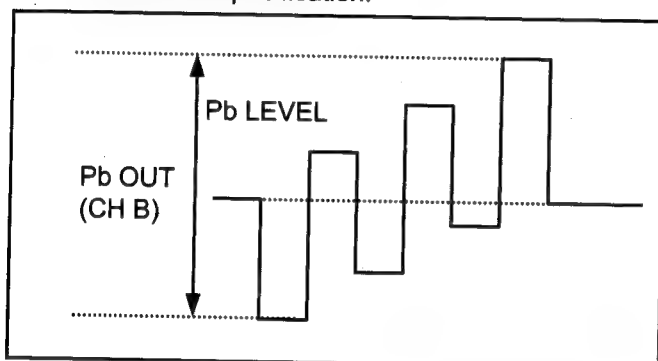
1. Adjust VR304 so that the frequency response becomes flat.



7-21. Component Pb Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	700mV \pm 7mV
TEST	COMPONENT PB OUT
ADJ.	VR306 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Color Bar portion)
M.EQ	Waveform Monitor

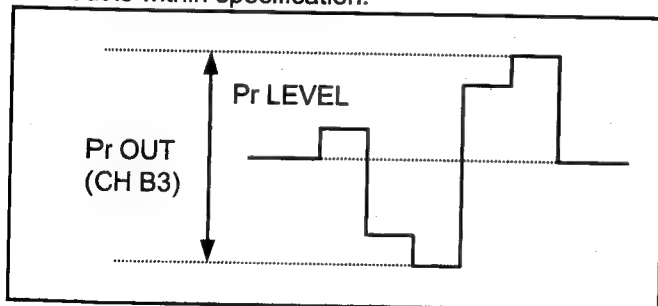
1. Adjust VR306 so that the Pb level of component out is within specification.



7-22. Component Pr Level Adjustment

P.C.B.	V_OUT (F4)
SPEC.	700mV \pm 7mV
TEST	COMPONENT Pr OUT
ADJ.	VR305 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (100% Color Bar portion)
M.EQ	Waveform Monitor

1. Adjust VR305 so that the Pr level of component out is within specification.

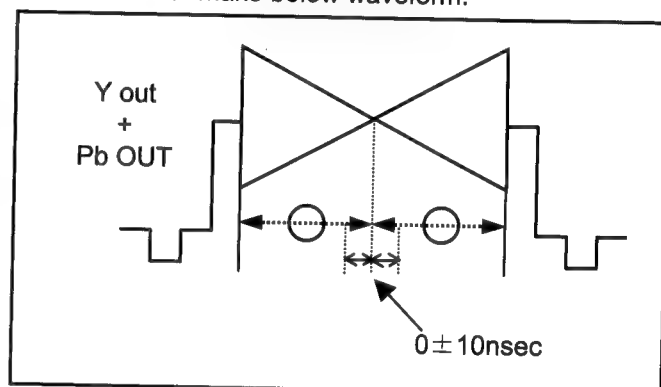


7-23. Component Y/Pb Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	0 \pm 10nsec
TEST	COMPONENT Y OUT, PB OUT
ADJ.	VR303 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (Bowtie portion)
M.EQ	Waveform Monitor

1. Set the waveform monitor in the YC timing measuring mode (CH B1 + CH B2).
2. Adjust VR303 so that the cross point of the envelope is at the center.

Note: Incase of WFM monitor does not have Y-Pb timing adjustment mode, if the oscilloscope have "ADD" and "INVERT" switch, please use those switch for make below waveform.

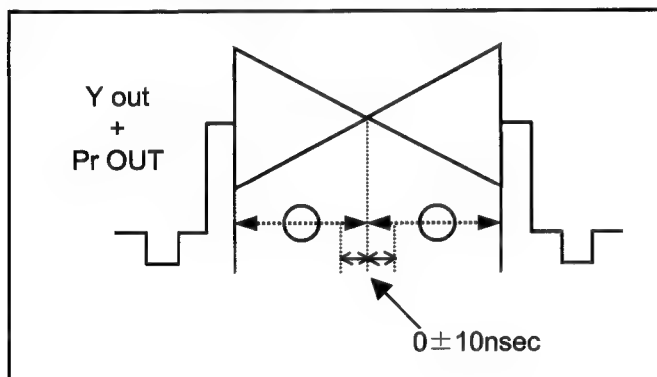


7-24. Component Y/Pr Timing Adjustment

P.C.B.	V_OUT (F4)
SPEC.	$0 \pm 10\text{nsec}$
TEST	COMPONENT Y OUT, Pr OUT
ADJ.	VR302 (E-1)
INPUT	-----
MODE	PLAY
TAPE	VFM3680KM (Bowtie portion)
M.EQ	Waveform Monitor

1. Set the waveform monitor in the YC timing measuring mode (CH B1 + CH B3).
2. Adjust VR302 so that the cross point of the envelope is at the center.

Note: Incase of WFM monitor does not have Y-Pb timing adjustment mode, if the oscilloscope have "ADD" and "INVERT" switch, please use those switch for make below waveform.

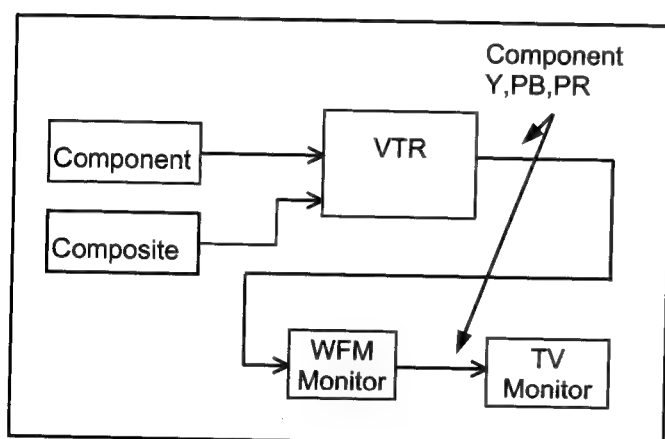


8. V IN P. C. Board [AJ-D450 only: For NTSC]

8-1. Preparation for Video In Adjustment

1. Connect the equipment as shown in the figure.
2. V IN P.C.Board adjustment should be performed after the V OUT P.C.Board adjustment.
3. Set the menu and SW as follows.

SET UP MENU 613: V IN SETUP → THOU
614: V OUT SETUP → THOU
600: PB PR IN LV → MII
• SW400 → MII (V OUT P.C.Board.)



8-2. 13.5MHz VCO Adjustment

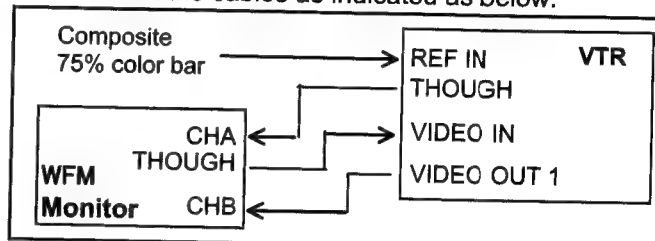
P.C.B.	V_IN (F6)
SPEC.	0V ± 0.1V
TEST	TP553(E-2)
ADJ.	VL551(F-2), VR552(F-2)
INPUT	Component 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Set VR552 to center position.
2. Adjust VL551 so that the DC Voltage is 0V ± 0.1V.
* First, turn VL551 to CCW.

8-3. Component Y Timing Adjustment

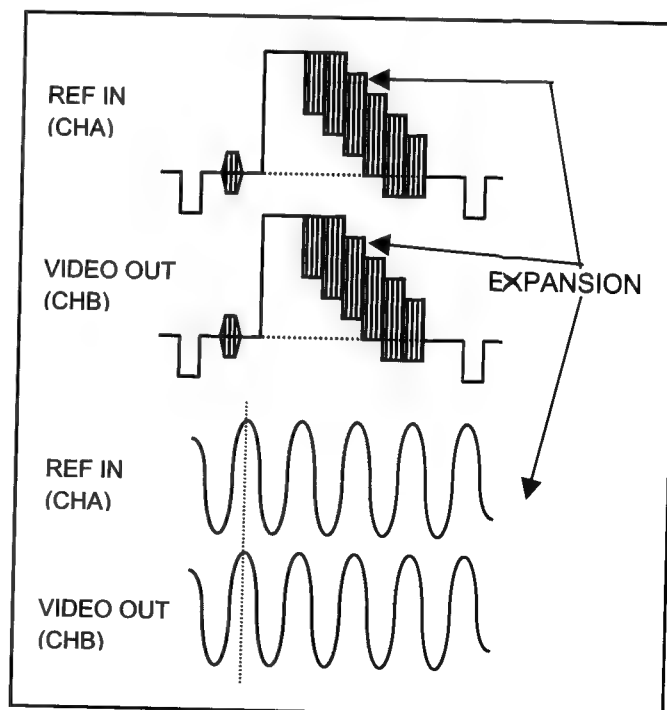
P.C.B.	V_IN (F6)
SPEC.	Phase synchronized between REF IN and VIDEO OUT 1.
TEST	REF IN, VIDEO OUT 1
ADJ.	VR551(E-2)
INPUT	Composite 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	WFM Monitor

1. Connect the cables as indicated as below.



2. Expand the GREEN portion of color bar signal.
3. Adjust VR551 while change the CHA and CHB of WFM monitor so that the phase synchronized between CHA (REF IN) and CHB (VIDEO OUT).

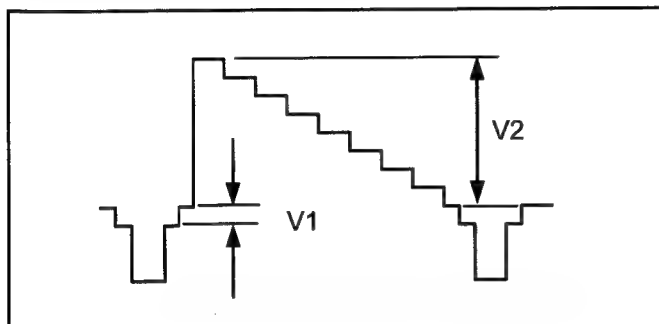
NOTE: This adjustment should be performed after V OUT P.C.Board adjustment.



8-4. Component Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	Y OUT
ADJ.	VR652(C-2), VR651(C-3)
INPUT	Component 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

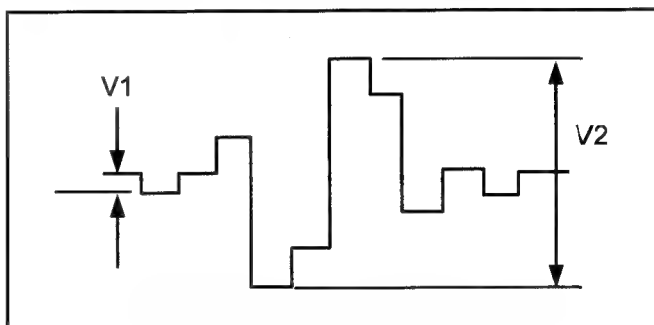
1. Adjust VR652 so that the V1 is $0V \pm 7mV$.
2. Adjust VR651 so that the V2 is $700mV \pm 7mV$.



8-6. Component PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	PR OUT
ADJ.	VR753(A-1), VR752(B-1)
INPUT	Component 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

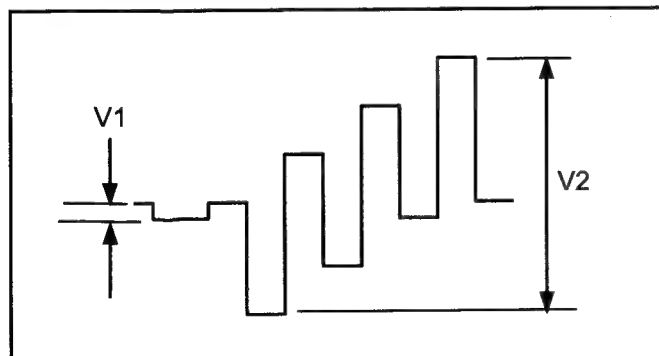
1. Adjust VR753 so that the V1 is $0V \pm 7mV$.
2. Adjust VR752 so that the V2 is $700mV \pm 7mV$.



8-5. Component PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	PB OUT
ADJ.	VR703(A-2), VR702(A-2)
INPUT	Component 100% Color Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

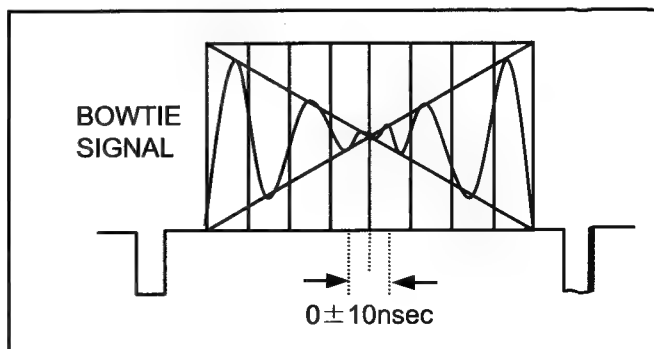
1. Adjust VR703 so that the V1 is $0 \pm 7mV$.
2. Adjust VR702 so that the V2 is $700m \pm 7mV$.



8-7. Component Y/C Timing Adjustment

P.C.B.	V_IN (F6)
SPEC.	$0 \pm 10nsec$
TEST	Y, PB, PR OUT
ADJ.	VR701(B-2), VR751(B-1)
INPUT	Component IN : BOWTIE
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR701(PB) so that the minimum level of the Y/PB timing signal is $0 \pm 10nsec$ against the center scale.
Adjust VR751(PR) so that the minimum level of the Y/PB timing signal is $0 \pm 10nsec$ against the center scale.

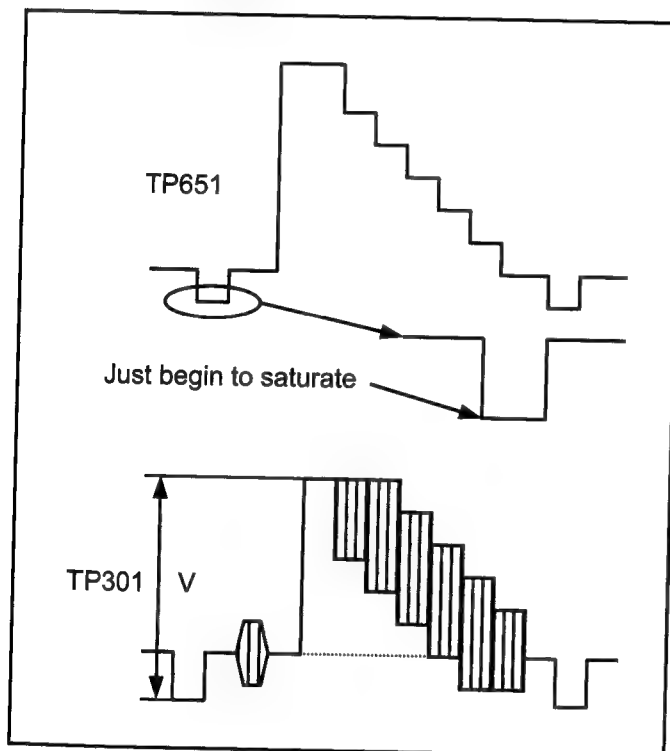


8-8. Composite Input Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V_1 = 1.6V \pm 0.02V$
TEST	TP651(C-3), TP301(I-3)
ADJ.	VR301(I-2), VR251(I-3)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Observe TP651 and adjust VR301 at the point where the sync tip just begin to saturate.
2. Adjust VR251 so that the voltage at TP301 is $1.6V \pm 0.02V$.

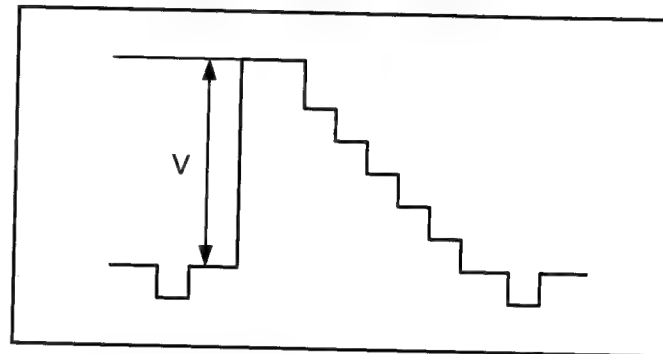
NOTE: Oscilloscope trigger should be connect to Connector P2-16a



8-9. Composite Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700mV \pm 7mV$
TEST	Y OUT
ADJ.	VR352(I-1)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR352 so that the V is $700mV \pm 7mV$.

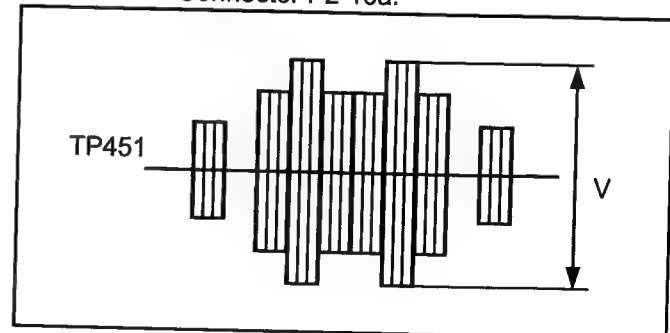


8-10. Composite Color Level Adj.

P.C.B.	V_IN (F6)
SPEC.	$V = 360mV \pm 20mV$
TEST	TP451(H-1)
ADJ.	VR351(I-1)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR351 so that the V is $360mV \pm 20mV$.

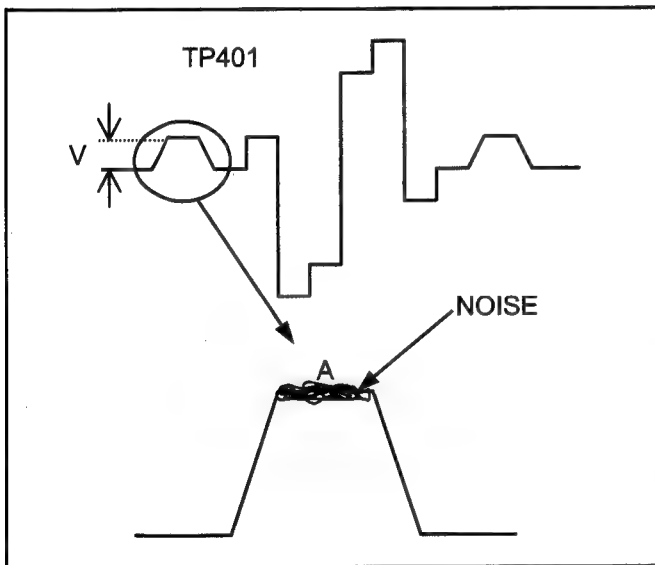
NOTE: Oscilloscope trigger should be connect to Connector P2-16a.



8-11. Composite Color Demodulation Adjustment

P.C.B.	V_IN (F6)
SPEC.	See figure
TEST	TP401(F-2)
ADJ.	VR408(H-2), VR409(G-2)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

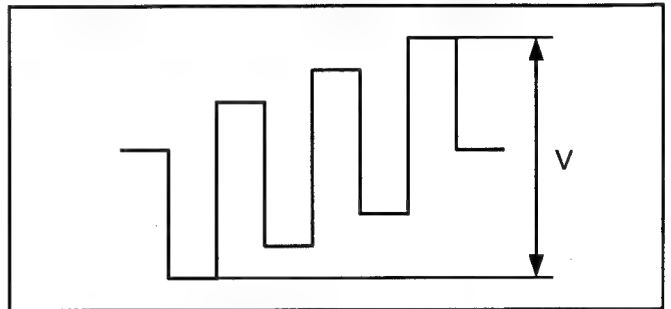
1. Turn VR409 to fully counter-clockwise.
2. Adjust VR408 so that the noise portion is positioned on the top of A portion as shown in figure.
3. Adjust VR409 so that the level V is become 0Vp-p.



8-12. Composite PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 486\text{mV} \pm 7\text{mV}$
TEST	PB OUT
ADJ.	VR460(G-1)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

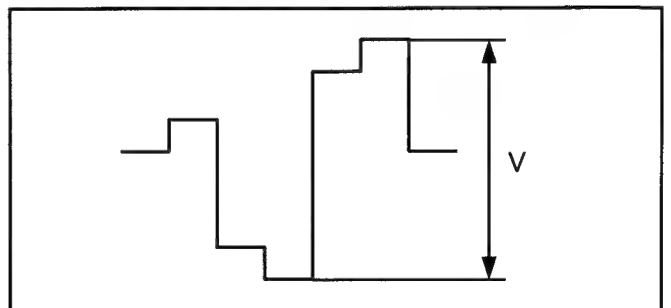
1. Adjust VR460 so that the V is $486\text{mV} \pm 7\text{mV}$



8-13. Composite PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 486\text{mV} \pm 7\text{mV}$
TEST	PR OUT
ADJ.	VR464(F-1)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR464 so that the V is $486\text{mV} \pm 7\text{mV}$

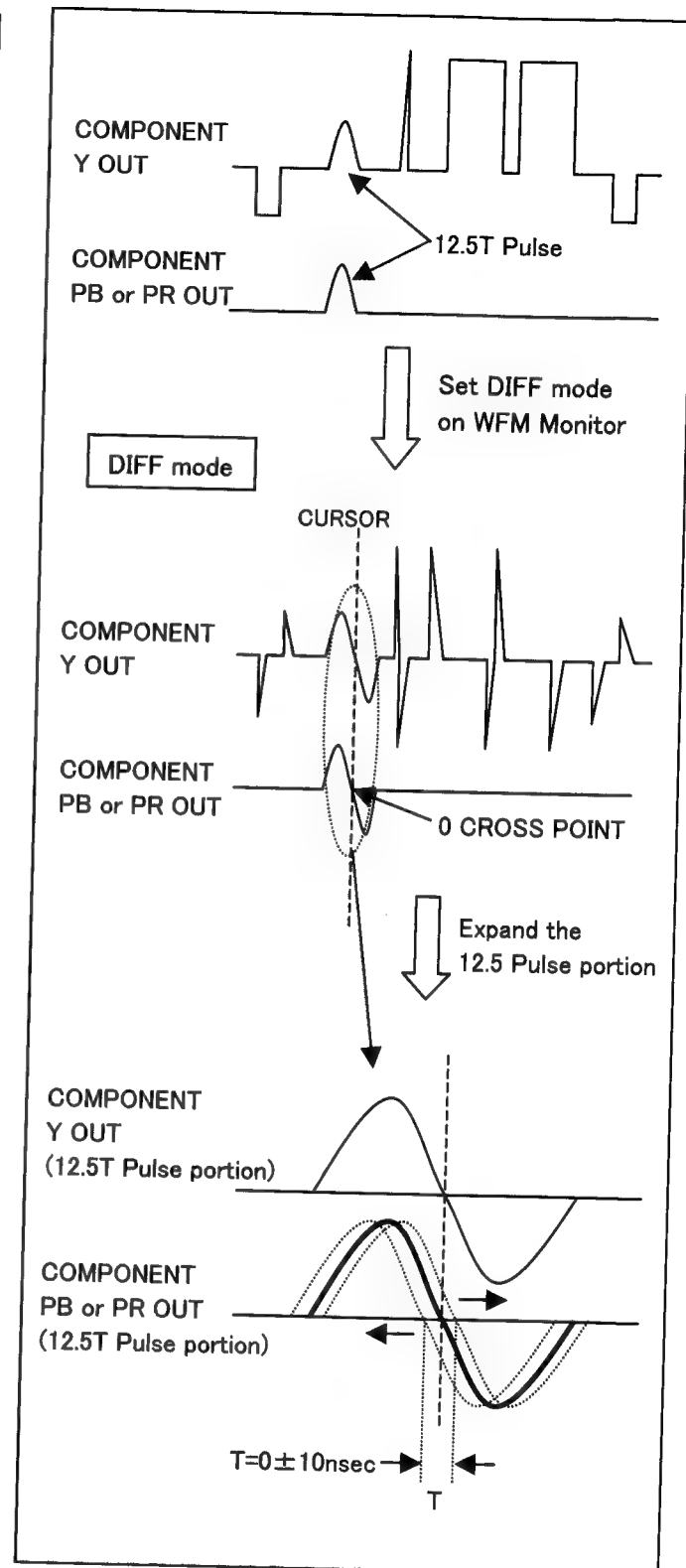


8-14. Composite YC Timing Adjustment

P.C.B.	V_IN (F6)
SPEC.	$T = 0 \pm 10\text{nsec}$
TEST	Y PR PB OUT
ADJ.	VR459(G-1), VR463(G-1)
INPUT	Composite IN : 12.5T Pulse & Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Confirm that the 12.5T Pulse & Bar signal appeared correctly on the scope with Component Y OUT as shown in figure.
2. Confirm that the 12.5T Pulse portion appeared correctly on the scope with Component PB and PR OUT as shown in figure.
3. Set WFM monitor to DIFF mode. In case of set the DIFF mode, waveform of Y, PB and PR signals are integrated as shown in figure.
4. Expand the 12.5 pulse portion (an ellipse dotted portion as indicated as figure) and set the cursor to 0 cross point as shown in figure.
5. Sine-wave is appeared on the scope by expansion as shown in figure.
6. Adjust VR459(PB) and VR463(PR) so that the phase synchronized between Y and PB, PR signals.

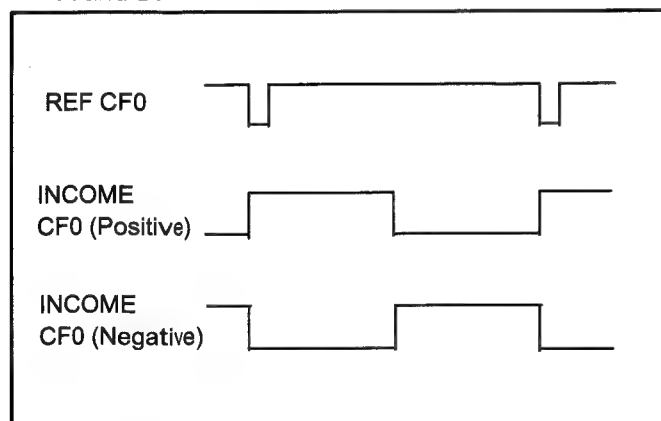
NOTE: Please use type of WFM Monitor attached DIFF mode



8-15. Composite SCH Detection Adjustment

P.C.B.	V_IN (F6)
SPEC.	See below
TEST	CF OUT (TEST SIG GEN) Connector P2-8C (INCOME CF0 pulse)
ADJ.	VR407(H-2)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

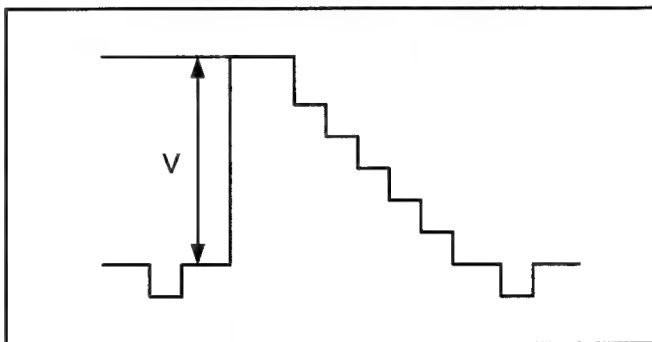
1. Set VR407 fully CCW.
2. If Income CF0 pulse does not negative pulse, slowly turn VR407 CW and set the position where the Income CF0 pulse just changes from the positive to negative phase as shown in below figure.
3. Set the VR407 so that the phase of Income CF0 pulse just changes from the negative to positive position as shown in below figure. Memorized this adjusted position of VR as position A.
4. Set the VR407 so that the phase of Income CF0 pulse just changes from the positive to negative position as shown in below figure. Memorized this adjusted position of VR as position B.
5. Set the VR407 so that the center between position A and B.



8-16. YC Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	Y OUT
ADJ.	VR354(H-1)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

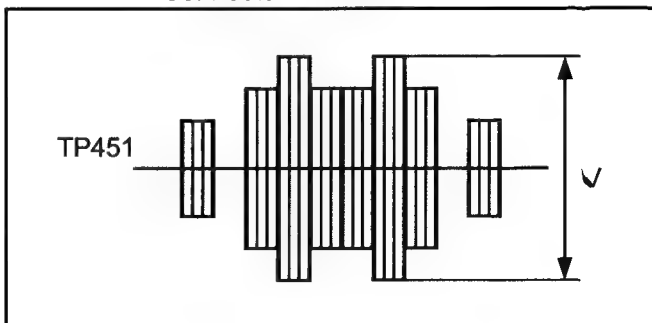
1. Adjust VR354 so that the V is $700\text{mV} \pm 7\text{mV}$.



8-17.YC Color Level Adj.

P.C.B.	V_IN (F6)
SPEC.	$V = 360\text{mV} \pm 20\text{mV}$
TEST	TP451(H-1)
ADJ.	VR353(H-2)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

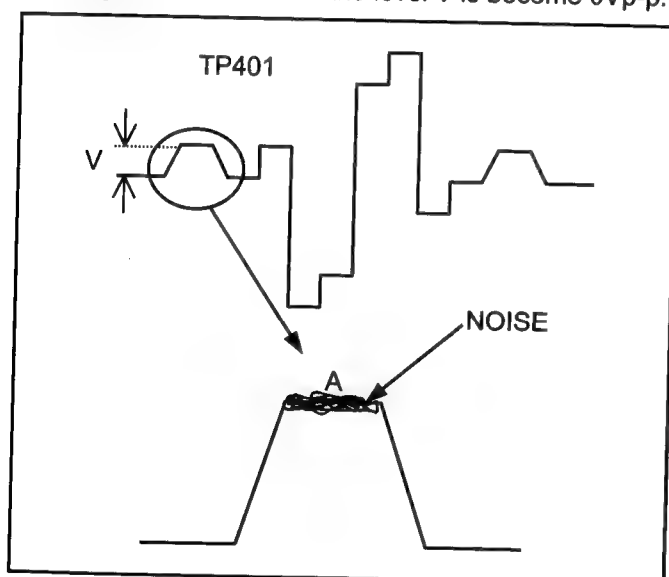
1. Adjust VR353 so that the V is $360\text{mV} \pm 20\text{mV}$.
NOTE: Oscilloscope trigger should be connect to Connector P2-16a.



8-18. YC Color Demodulation Adjustment

P.C.B.	V_IN (F6)
SPEC.	See figure
TEST	TP401(F-2)
ADJ.	VR409(G-2), VR410(G-2)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

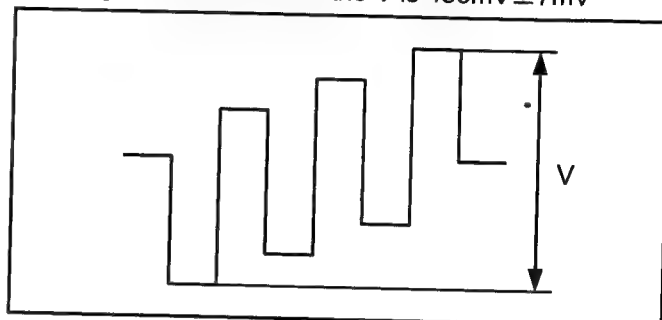
1. Turn VR409 to fully counter-clockwise.
2. Adjust VR410 so that the noise portion is positioned on the top of A portion as shown in figure.
3. Adjust VR409 so that the level V is become 0Vp-p.



8-19. YC PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 486\text{mV} \pm 7\text{mV}$
TEST	PB OUT
ADJ.	VR462(F-1)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

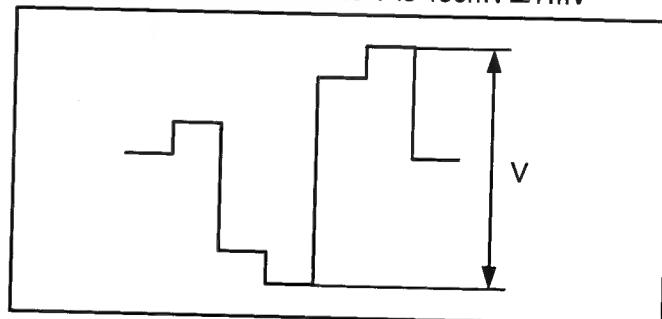
1. Adjust VR462 so that the V is $486\text{mV} \pm 7\text{mV}$



8-20. YC PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 486\text{mV} \pm 7\text{mV}$
TEST	PR OUT
ADJ.	VR466(E-1)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR466 so that the V is $486\text{mV} \pm 7\text{mV}$

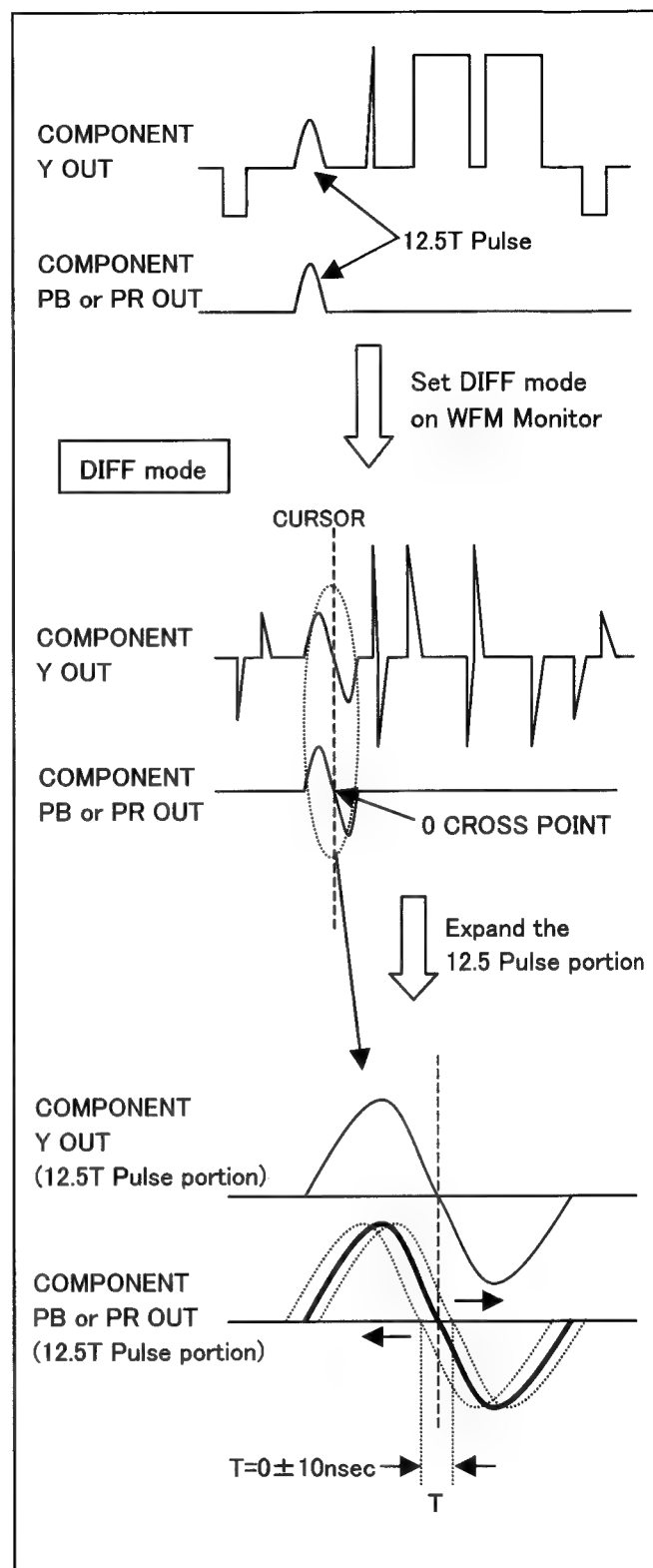


8-21. YC Timing Adjustment (YC)

P.C.B.	V_IN (F6)
SPEC.	$T = 0 \pm 10\text{nsec}$
TEST	Y PR PB OUT
ADJ.	VR461(F-1), VR465(F-1)
INPUT	S-VIDEO IN : 12.5T Pulse & Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

- Confirm that the 12.5T Pulse & Bar signal appeared correctly on the scope with Component Y OUT as shown in figure.
- Confirm that the 12.5T Pulse portion appeared correctly on the scope with Component PB and PR OUT as shown in figure.
- Set WFM monitor to DIFF mode. In case of set the DIFF mode, waveform of Y, PB and PR signals are integrated as shown in figure.
- Expand the 12.5 pulse portion (an ellipse dotted portion as indicated as figure) and set the cursor to 0 cross point as shown in figure.
- Sine-wave is appeared on the scope by expansion as shown in figure.
- Adjust VR461(PB) and VR465(PR) so that the phase synchronized between Y and PB, PR signals.

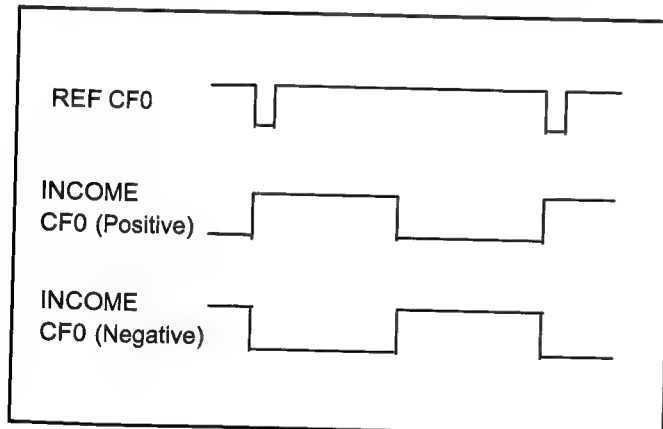
NOTE: Please use type of WFM Monitor attached DIFF mode



8-22. YC SCH Detection Adjustment

P.C.B.	V_IN (F6)
SPEC.	See below
TEST	CF OUT (TEST SIG GEN) Connector P2-8C (INCOME CF0 pulse)
ADJ.	VR407(H-2)
INPUT	S-VIDEO: 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

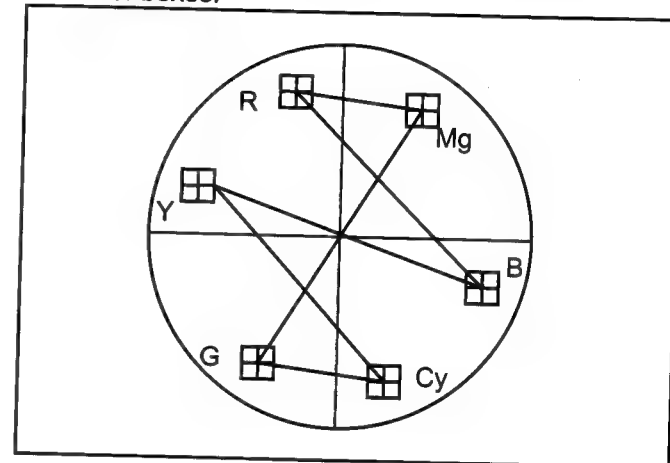
1. Set VR407 fully CCW.
2. If Income CF0 pulse does not negative pulse, slowly turn VR407 CW and set the position where the Income CF0 pulse just changes from the positive to negative phase as shown in below figure.
3. Set the VR407 so that the phase of Income CF0 pulse just changes from the negative to positive position as shown in below figure. Memorized this adjusted position of VR as position A.
4. Set the VR407 so that the phase of Income CF0 pulse just changes from the positive to negative position as shown in below figure. Memorized this adjusted position of VR as position B.
5. Set the VR407 so that the center between position A and B.



8-23. Composite Vector Adjustment

P.C.B.	V_IN (F6)
SPEC.	All vector dots are In Inner Boxes
TEST	COMPOSITE OUT
ADJ.	VR409(G-2)
INPUT	COMPOSITE 75% Color Bar (Set up 7.5%)
MODE	EE
TAPE	-----
M.EQ	Vector Scope

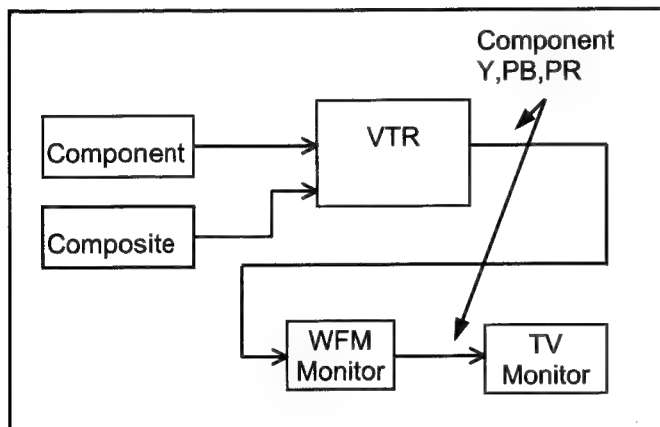
1. Adjust VR409 so that the all vector dots are in the inner boxes.



8. V IN P. C. Board [AJ-D450 only: For PAL]

8-1. Preparation for Video In Adjustment

1. Connect the equipment as shown in the figure.
2. V IN P.C.Board adjustment should be performed after the V OUT P.C.Board adjustment.



8-2. 13.5MHz VCO Adjustment

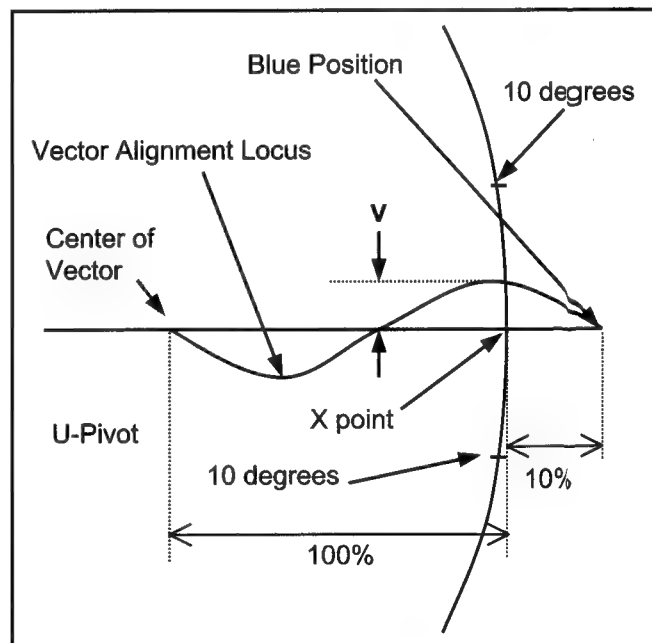
P.C.B.	V_IN (F6)
SPEC.	$0V \pm 0.1V$
TEST	TP553(E-2)
ADJ.	VL551(F-3), VR552(F-2)
INPUT	Component 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Set VR552 to center position.
2. Adjust VL551 so that the DC Voltage is $0V \pm 0.1V$.
* First, turn VL551 to CCW.

8-3. Component Y Timing Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = \pm 0.5$ degree
TEST	VIDEO OUT 1
ADJ.	VR551(E-2)
INPUT	Composite 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Vector Scope

1. Connect the vector scope to composite out terminal.
2. Expand the Vector Alignment Locus, where the blue point position on vector scale (X point as shown in below figure) and set the vector Alignment Locus on the u-pivot by adjust gain and phase VR on the vector scope.
3. Expand the Vector Alignment Locus 10% as compare with 100% as shown in below figure.
4. Adjust VR551 so that the vector adjustment locus is become straight, it should be in specification.



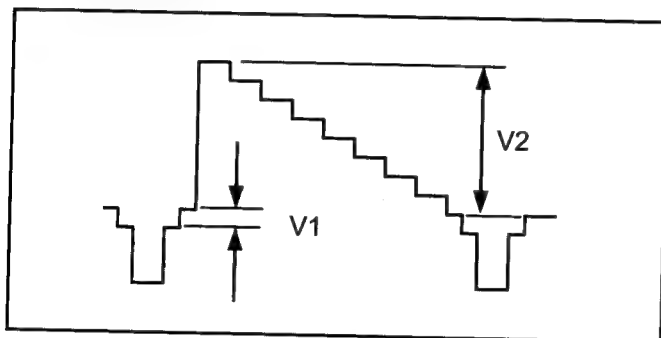
NOTE: In case of use VM700A

1. Set the blue point position to tip of U-Pivot.
2. Set the Average ON of VM700A
3. Adjust VR551 so that the vector adjustment locus is match to X point, and it should be in specification.

8-4. Component Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	Y OUT
ADJ.	VR652(C-2), VR651(C-3)
INPUT	Component 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

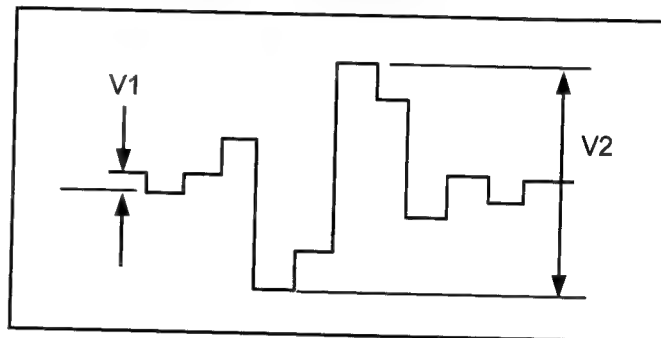
1. Adjust VR652 so that the V1 is $0V \pm 7mV$.
2. Adjust VR651 so that the V2 is $700mV \pm 7mV$.



8-6. Component PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	PR OUT
ADJ.	VR753(A-1), VR752(B-1)
INPUT	Component 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

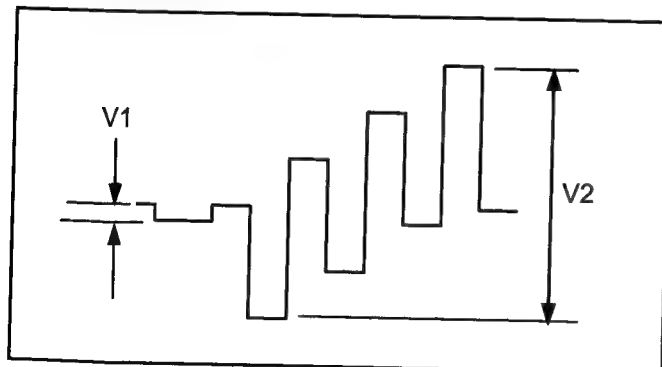
1. Adjust VR753 so that the V1 is $0V \pm 7mV$.
2. Adjust VR752 so that the V2 is $700mV \pm 7mV$.



8-5. Component PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	V1 = $0V \pm 7mV$, V2 = $700mV \pm 7mV$
TEST	PB OUT
ADJ.	VR703(A-2), VR702(A-2)
INPUT	Component 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR703 so that the V1 is $0 \pm 7mV$.
2. Adjust VR702 so that the V2 is $700m \pm 7mV$.

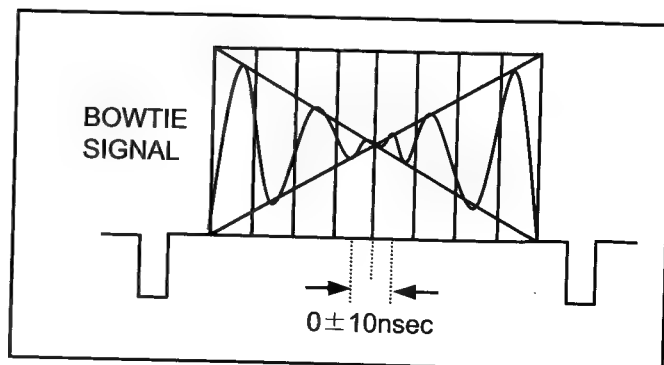


8-7. Component Y/C Timing Adjustment

P.C.B.	V_IN (F6)
SPEC.	$0 \pm 10nsec$
TEST	Y, PB, PR OUT
ADJ.	VR701(B-2), VR751(B-1)
INPUT	Component IN : BOWTIE
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR701(PB) so that the minimum level of the Y/PB timing signal is $0 \pm 10nsec$ against the center scale.

Adjust VR751(PR) so that the minimum level of the Y/PB timing signal is $0 \pm 10nsec$ against the center scale.

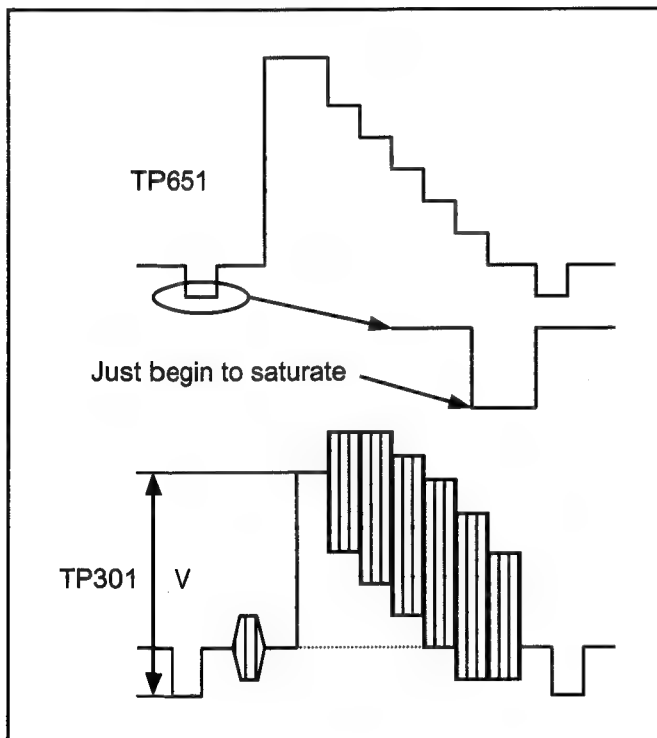


8-8. Composite Input Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V_1 = 1.6V \pm 0.02V$
TEST	TP651(C-3), TP301(I-3)
ADJ.	VR301(I-2), VR251(I-3)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

1. Observe TP651 and adjust VR301 at the point where the sync tip just begin to saturate.
2. Adjust VR251 so that the voltage at TP301 is $1.6V \pm 0.02V$.

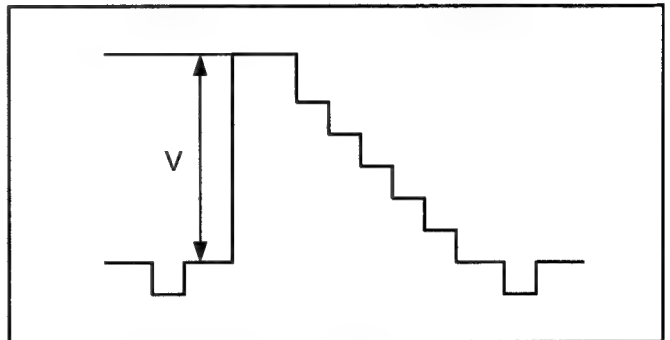
NOTE: Oscilloscope trigger should be connect to Connector P2-16a



8-9. Composite Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700mV \pm 7mV$
TEST	Y OUT
ADJ.	VR352(I-1)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

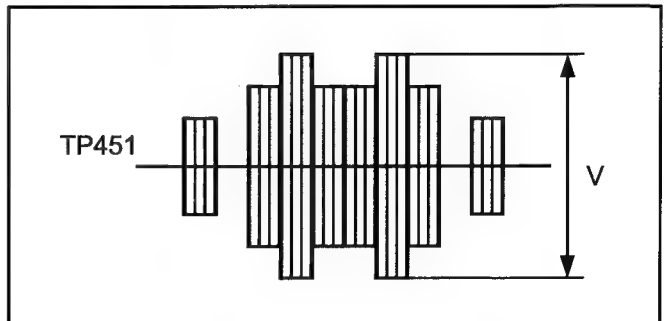
1. Adjust VR352 so that the V is $700mV \pm 7mV$.



8-10. Composite Colour Level Adj.

P.C.B.	V_IN (F6)
SPEC.	$V = 500mV \pm 20mV$
TEST	TP451(H-1)
ADJ.	VR351(I-1)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

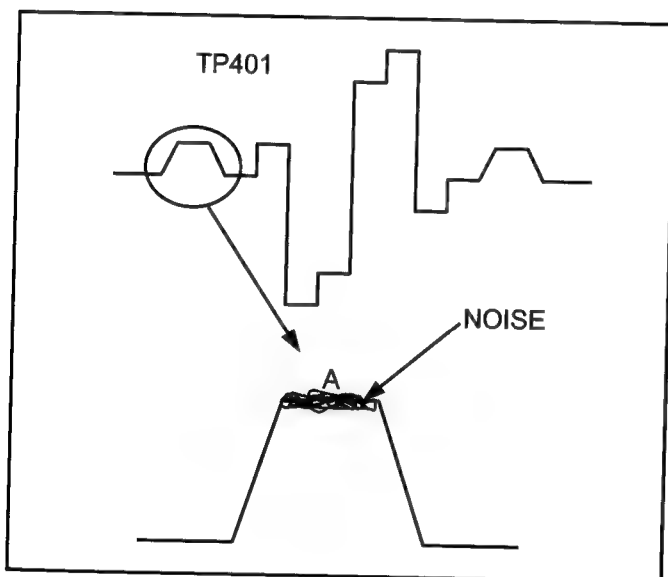
1. Adjust VR351 so that the V is $500mV \pm 20mV$.
- NOTE: Oscilloscope trigger should be connect to Connector P2-16a.



8-11. Composite Colour Demodulation Adjustment

P.C.B.	V_IN (F6)
SPEC.	See figure
TEST	TP401(F-2)
ADJ.	VR408(H-2), VR409(G-2)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

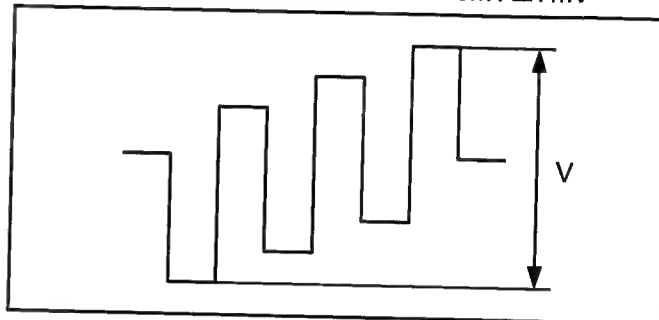
1. Adjust VR409 so that the waveform is shown in figure (no double image).
2. Adjust VR408 so that the noise portion is positioned on the top of A portion as shown in figure.



8-12. Composite PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	PB OUT
ADJ.	VR460(G-1)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

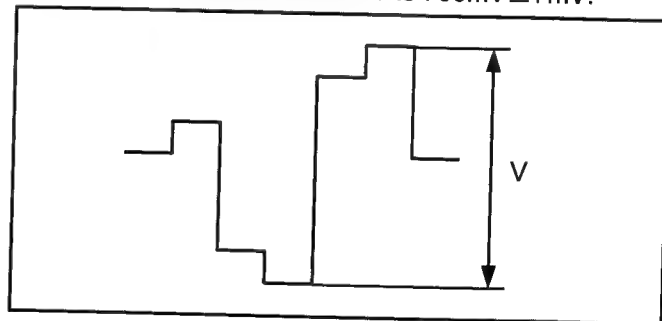
1. Adjust VR460 so that the V is $700\text{mV} \pm 7\text{mV}$



8-13. Composite PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	PR OUT
ADJ.	VR464(F-1)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR464 so that the V is $700\text{mV} \pm 7\text{mV}$.

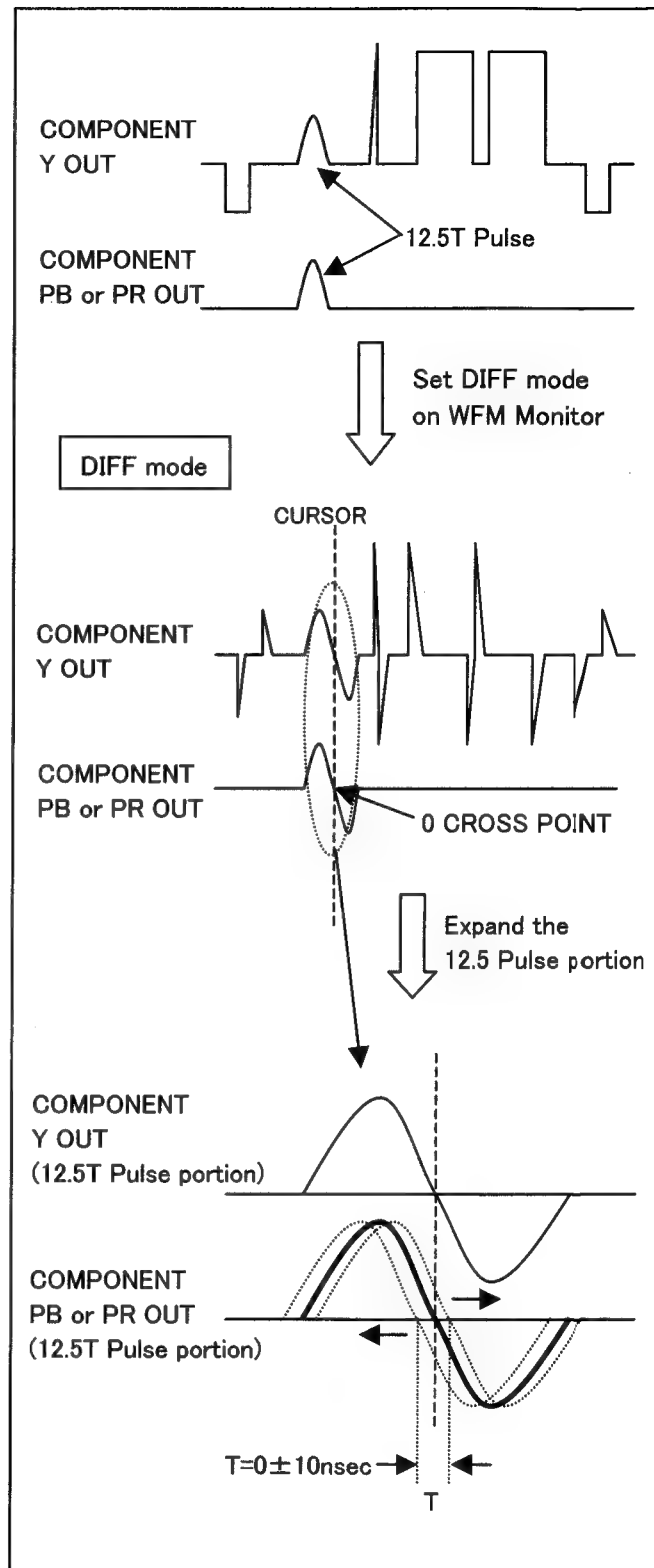


8-14. Composite YC Timing Adjustment

P.C.B.	V_IN (F6)
SPEC.	$T = 0 \pm 10\text{nsec}$
TEST	Y PR PB OUT
ADJ.	VR459(G-1), VR463(G-1)
INPUT	Composite IN : 12.5T Pulse & Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Confirm that the 12.5T Pulse & Bar signal appeared correctly on the scope with Component Y OUT as shown in figure.
2. Confirm that the 12.5T Pulse portion appeared correctly on the scope with Component PB and PR OUT as shown in figure.
3. Set WFM monitor to DIFF mode. In case of set the DIFF mode, waveform of Y, PB and PR signals are integrated as shown in figure.
4. Expand the 12.5 pulse portion (an ellipse dotted portion as indicated as figure) and set the cursor to 0 cross point as shown in figure.
5. Sine-wave is appeared on the scope by expansion as shown in figure.
6. Adjust VR459(PB) and VR463(PR) so that the phase synchronized between Y and PB, PR signals.

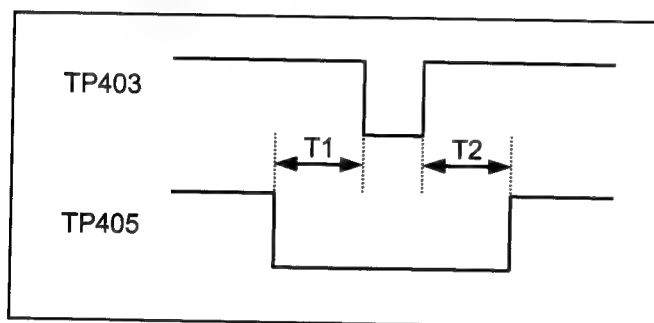
NOTE: Please use type of WFM Monitor attached DIFF mode



8-15. Composite SCH Detection Adjustment

P.C.B.	V_IN (F6)
SPEC.	$T1 - T2 = \pm 0.5\text{msec}$
TEST	TP403(G-2), TP405(G-2)
ADJ.	VR407(H-2)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

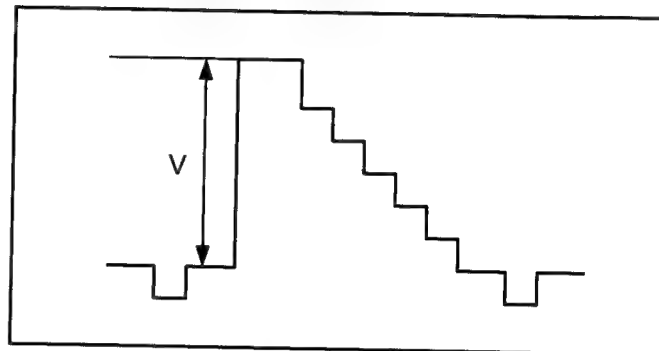
1. Adjust VR407 so that the T1 and T2 in specification.



8-16. YC Y Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	Y OUT
ADJ.	VR354(H-1)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR354 so that the V is $700\text{mV} \pm 7\text{mV}$.

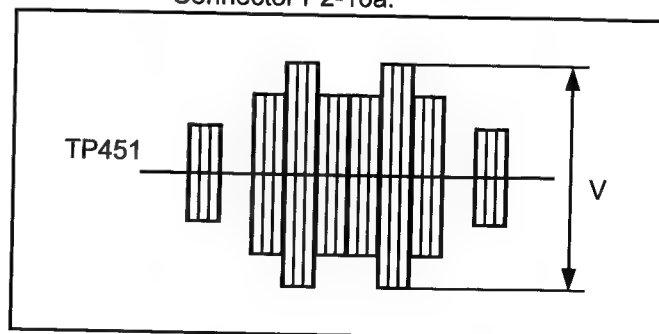


8-17. YC Colour Level Adj.

P.C.B.	V_IN (F6)
SPEC.	$V = 500\text{mV} \pm 20\text{mV}$
TEST	TP451(H-1)
ADJ.	VR353(H-2)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR353 so that the V is $500\text{mV} \pm 20\text{mV}$.

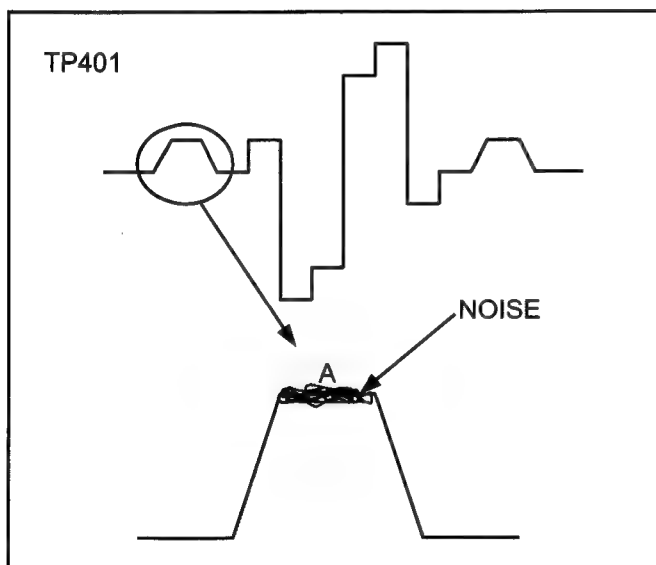
NOTE: Oscilloscope trigger should be connect to Connector P2-16a.



8-18. YC Colour Demodulation Adjustment

P.C.B.	V_IN (F6)
SPEC.	See figure
TEST	TP401(F-2)
ADJ.	VR409(G-2), VR410(G-2)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

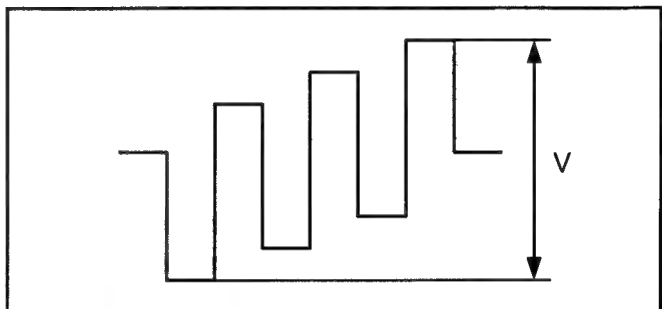
1. Adjust VR409 so that the waveform is shown in figure (no double image).
2. Adjust VR408 so that the noise portion is positioned on the top of A portion as shown in figure.



8-19. YC PB Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	PB OUT
ADJ.	VR462(F-1)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

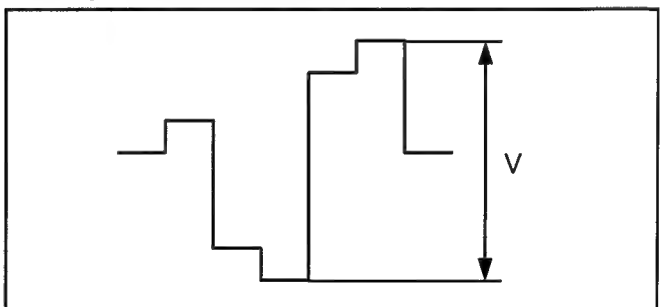
1. Adjust VR462 so that the V is $700\text{mV} \pm 7\text{mV}$



8-20. YC PR Level Adjustment

P.C.B.	V_IN (F6)
SPEC.	$V = 700\text{mV} \pm 7\text{mV}$
TEST	PR OUT
ADJ.	VR466(E-1)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

1. Adjust VR466 so that the V is $700\text{mV} \pm 7\text{mV}$.

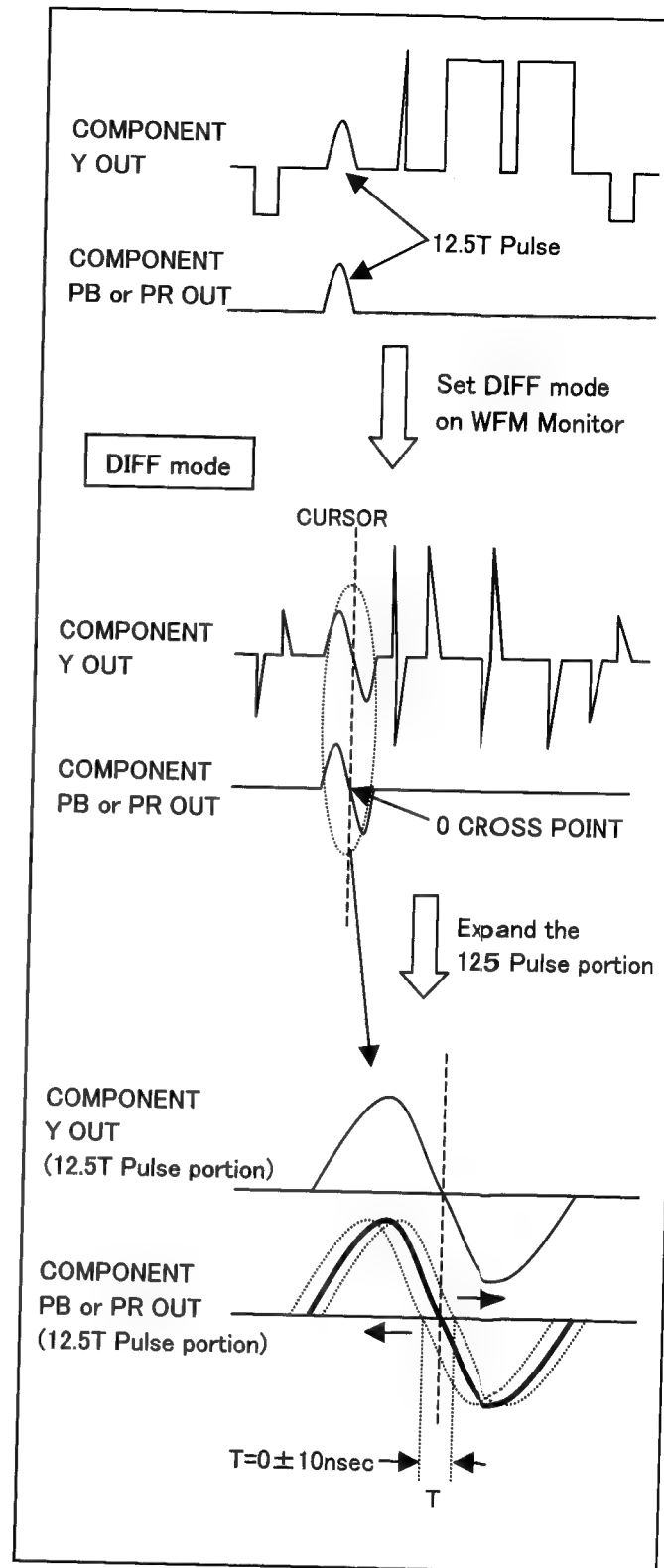


8-21. YC Timing Adjustment (YC)

P.C.B.	V_IN (F6)
SPEC.	$T = 0 \pm 10\text{nsec}$
TEST	Y PR PB OUT
ADJ.	VR461(F-1), VR465(F-1)
INPUT	S-VIDEO IN : 12.5T Pulse & Bar
MODE	EE
TAPE	-----
M.EQ	Waveform Monitor

- Confirm that the 12.5T Pulse & Bar signal appeared correctly on the scope with Component Y OUT as shown in figure.
- Confirm that the 12.5T Pulse portion appeared correctly on the scope with Component PB and PR OUT as shown in figure.
- Set WFM monitor to DIFF mode. In case of set the DIFF mode, waveform of Y, PB and PR signals are integrated as shown in figure.
- Expand the 12.5 pulse portion (an ellipse dotted portion as indicated as figure) and set the cursor to 0 cross point as shown in figure.
- Sine-wave is appeared on the scope by expansion as shown in figure.
- Adjust VR461(PB) and VR465(PR) so that the phase synchronized between Y and PB, PR signals.

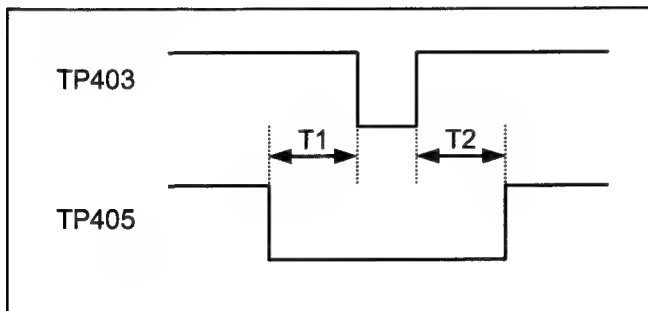
NOTE: Please use type of WFM Monitor attached DIFF mode



8-22. YC SCH Detection Adjustment

P.C.B.	V_IN (F6)
SPEC.	See below
TEST	TP403(G-2), TP405(G-2)
ADJ.	VR407(H-2)
INPUT	S-VIDEO: 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Oscilloscope

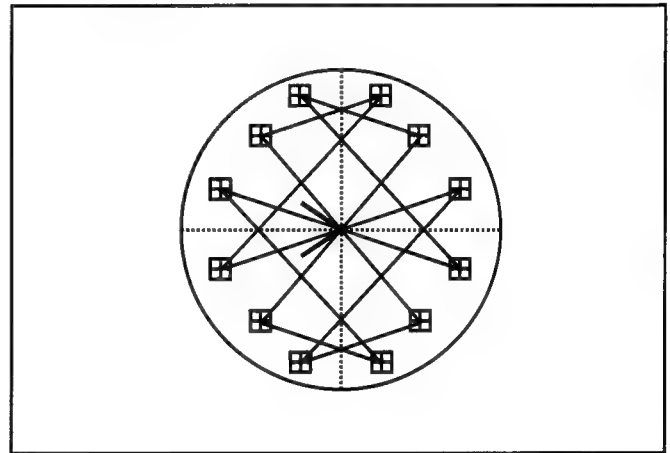
1. Adjust VR407 so that the T1 and T2 in specification.



8-23. Composite Vector Adjustment

P.C.B.	V_IN (F6)
SPEC.	All vector dots are In Inner Boxes
TEST	VIDEO OUT 1
ADJ.	VR409(G-2)
INPUT	COMPOSITE 100% Colour Bar
MODE	EE
TAPE	-----
M.EQ	Vector Scope

1. Adjust VR409 so that the all vector dots are in the inner boxes.



9. ADDA CUE (F8)

9-1. Initial Setting of PCM Adjustment

< Switch Setting >

1. Set the switch as shown below.

Ref No.	Name	Setting Position
SW4381	NR SELECT	NORMAL

< Setting of Front switches >

NAME	Setting Position
HEAD PHONES	MIX
HR VR	CENTER
REMOTE/LOCAL	LOCAL

< User Menu Setting >

Open the AUDIO item (No. 700 series) of the SETUP-MENU and set the items as shown below.

Item No.	Name	Setting Value
700	MONIL OUT LEV	0 dB
701	MONIR OUT LEV	0 dB
702	MONI CH SEL	AUTO1
703	MONI OUT SEL	PCM

< Measurement Equipment Setting >

In case of use Audio Precision, please set switches as shown below.

OSC Output Impedance	Less than 50 ohm (Balance Out)
Input Impedance	More than 100Kohm (Balance In)

9-2. Output Level Adjustment(AJ-D450)

P.C.B.	ADDA CUE(F8)
SPEC.	0dBu \pm 0.1dBu
TEST	AUDIO OUT: CH1, CH2
ADJ.	VR4221 (CH1), VR4281 (CH2)
INPUT	INT Signal
MODE	EJECT
TAPE	-----
M.EQ	Audio Analyzer VTVM(Audio Precision)

1. Open Set up menu and set the item "No.722:INT SG" to ON.
2. Adjust VR4221 so that the CH1 level is in the specification.
3. Adjust VR4281 so that the CH2 level is in the specification.
4. Confirm all channels that the sine-wave output is normal.

9-2. Output Level Adjustment(AJ-D440)

P.C.B.	ADDA CUE(F8)
SPEC.	0dBu \pm 0.1dBu
TEST	AUDIO OUT: CH1, CH2
ADJ.	VR4221 (CH1), VR4281 (CH2)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM PAL: VFM3680KM
M.EQ	Audio Analyzer VTVM(Audio Precision)

1. Adjust VR4221 so that the CH1 level is in the specification.
2. Adjust VR4281 so that the CH2 level is in the specification.
3. Confirm all channels that the sine-wave output is normal.

9-3. Monitor Output Level Adjustment (AJ-D450)

P.C.B.	ADDA CUE(F8)
SPEC.	-0.8dBV \pm 0.2dB
TEST	MONITOR OUT
ADJ.	VR4341
INPUT	INT Signal
MODE	EJECT
TAPE	-----
M.EQ	Audio Analyzer VTVM (Audio Precision)

1. Open the Set Up menu and set the items " 722: INT SG " to ON.
2. Adjust VR4341 so that the MONITOR OUT level is in the specification.
3. Confirm MONITOR OUT that the sine-wave output is normal.

9-4. Input Level Adjustment (Only AJ-D450)

P.C.B.	ADDA CUE(F8)
SPEC.	-0.2dBm \pm 0.1dB
TEST	AUDIO OUT (CH1, CH2)
ADJ.	VR4002 (CH1), VR4062 (CH2)
INPUT	1kHz 0dBm Sine-wave (BAL)
MODE	EE
TAPE	-----
M.EQ	Audio Analyzer VTVM (Audio Precision)

1. Adjust VR4002 so that the CH1 level is in the specification.
2. Adjust VR4062 so that the CH2 level is in the specification.

9-3. Monitor Output Level Adjustment (AJ-D440)

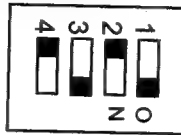
P.C.B.	ADDA CUE(F8)
SPEC.	-0.8dBV \pm 0.2dB
TEST	MONITOR OUT
ADJ.	VR4341
INPUT	-----
MODE	PLAY
TAPE	NTSC:VFM3580KM PAL:VFM3680KM
M.EQ	Audio Analyzer VTVM (Audio Precision)

1. Adjust VR4341 so that the MONITOR OUT level is in the specification.
2. Confirm MONITOR OUT that the sine-wave output is normal.

9-5. Initial Setting of CUE Adjustment

< Setting of switches on P.C.Board >

Set the switches indicated as below.

Ref No.	Name of SW	Position
SW4001	CH1 input Impedance	HIGH
SW4061	CH2 input Impedance	HIGH
SW4382	NR Select	NORMAL
SW4381	REC EQ	 1,3 ON

Note: In case of SW4001, 4061 and 4382 did not install on P.C.Board, those 3 switches setting no required.(Case of AJ-D440)

< Measurement Equipment Setting >

In case of use Audio Precision, please set switches as shown below.

OSC Output Impedance	Less than 50 ohm (Balance Out)
Input Impedance	More than 100Kohm (Balance In)

< Service Menu Setting >

Open the AUDIO ADJUST menu on Service menu and set item " E04: LINE OUT CUE " to ON.

9-6. CUE Erase Frequency Adj. (Only AJ-D450)

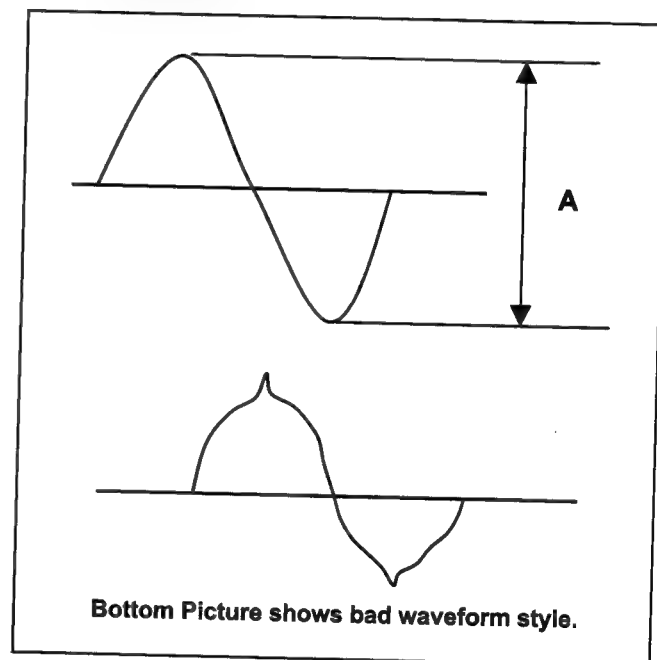
P.C.B.	ADDA CUE (F8)
SPEC.	70kHz \pm 0.2kHz
TEST	TP4501, TG4501 (GND)
ADJ.	T4501
INPUT	-----
MODE	REC
TAPE	Blank Tape
M.EQ	Frequency Counter

1. Adjust T4501 so that the frequency level is in the specification.

9-7. CTL Erase / CUE Erase Current Adjustment (Only AJ-D450)

P.C.B.	ADDA CUE (F8)
SPEC.	A = 290mVp-p \pm 50mV
TEST	TP4501 (CUE), TP4502 (CTL) TG4501 (GND)
ADJ.	T4503 (CUE), T4504 (CTL)
INPUT	-----
MODE	REC
TAPE	Blank Tape
M.EQ	Oscilloscope

1. Adjust T4501 so that the voltage at TP4503 is in the specification.
2. Adjust T4504 so that the voltage at TP4502 is in the specification.



9-8. CUE Bias Current Adjustment (Only AJ-D450)

P.C.B.	ADDA CUE (F8)
SPEC.	7 mVrms \pm 0.5 mVrms (19.7mVp-p \pm 1.5mVp-p)
TEST	TP4382, (GND: TP4383)
ADJ.	T4501, VR4501
INPUT	-----
MODE	REC
TAPE	Blank Tape
M.EQ	Vacuum Tube Volt Meter

1. Connect the Vacuum Tube Volt Meter between TP4382 and TP4383(GND) and confirm the voltage is in the specification.
2. If it is out of specification, adjust T4501 so that the level becomes maximum and adjust VR4501 so that the level is in the specification.

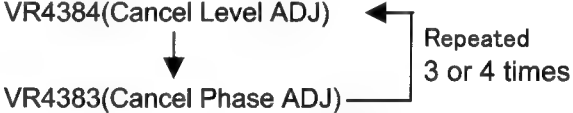
9-9. CUE PB Level Adjustment

P.C.B.	ADDA CUE (F8)
SPEC.	0dBu \pm 0.5dBu
TEST	AUDIO OUT (CH1)
ADJ.	VR4382(PB LEVEL)
INPUT	-----
MODE	PLAY
TAPE	NTSC: VFM3580KM (0 to 7 min) PAL: VFM3680KM (0 to 10 min)
M.EQ	VTVM (Audio Precision)

1. Playback the alignment tape and adjust VR4382 so that the CUE OUT(AUDIO OUT: CH1) level is in the specification.

9-10.CUE Noise Cancel Adjustment

P.C.B.	ADDA CUE (F8)
SPEC.	Minimum of error rate or Noise level = Less than -40dBu
TEST	TP4381 or AUDIO OUT(CH1)
ADJ.	VR4383, VR4384
INPUT	-----
MODE	PLAY
TAPE	Blank Tape (NO Signal Recorded portion)
M.EQ	Audio Analyzer Oscilloscope (Audio Precision)

1. Connect the TP4381 to scope and observe the noise level of TP4381.
2. Adjust VR4383 and VR4384 so that the noise level is minimum follow the below procedure.
VR4384(Cancel Level ADJ) 
VR4383(Cancel Phase ADJ)
3. In case of use Audio Precision, set indicated as below and connect AUDIO OUT to Audio Precision.
* MEASURE: BANDPASS
* BP/BR FREQ: 600Hz
* FILTER: OFF
4. Adjust VR4383 and VR4384 so that the noise level is in the specification follow the above procedure (item 2).

9-11. CUE REC/PB Level Adjustment (Only AJ-D450)

P.C.B.	ADDA CUE (F8)
SPEC.	0dBu \pm 1dBu
TEST	AUDIO OUT (CH1,CH2)
ADJ.	VR4381(REC CURR)
INPUT	LINE IN(CH1,CH2) : 1KHz, 0dBu Sine-wave (BAL)
MODE	REC
TAPE	Blank Tape
M.EQ	Audio Analyzer VTVM (Audio Precision)

1. Supply a 1KHz, 0dBu signal into the LINE Input and record the input signal for a few minutes.
2. Playback the just recorded portion.
3. Adjust VR4381 so that the CUE OUT (AUDIO OUT) level is in the specification.

NOTE: In case of use Audio Precision, set indicated as below.

- * MEASURE: AMPLITUDE
- * BP/BR FREQ: AUTO
- * FILTER: OFF
- * BANDWIDTH: 22Hz, 22KHz

SECTION 5

EXPLODED VIEWS & REPLACEMENT PARTS LISTS

Note:

1. *Be sure to make your orders of replacement parts according to this list.
2. Unless otherwise specified, all resistors are in OHMS, K=1,000 OHMS, all capacitors are in MICROFARADS (μ F), P= μ F.
3. The P.C. Board units marked with "■" shown below the main assembled parts.
4. The parts marked with (E) on the exploded view show the electric parts.
5. **IMPORTANT SAFETY NOTICE**
Components identified with the mark Δ have the special characteristics for safety. When replacing any of these components, use only the same type.
6. The marking (FTL) indicates the retention time is limited for this item.
After the discontinuation of this assembly in production, it will no longer be available.

<< Abbreviations for part >>

< NAME >		< DESCRIPTIONS >	
C. CAPACITOR		:	CERAMIC CAPACITOR
C. CAPACITOR	CH	:	CERAMIC CHIP CAPACITOR
E. CAPACITOR		:	ELECTROLYTIC CAPACITOR
G. CAPACITOR		:	GLASS CAPACITOR
M. CAPACITOR		:	MICA CAPACITOR
P. CAPACITOR		:	PLASTIC FILM CAPACITOR
S. CAPACITOR		:	SEMI-CONDUCTOR CAPACITOR
T. CAPACITOR		:	TANTALUM CAPACITOR
TRIMMER		:	TRIMMER
C.RESISTOR		:	CARBON RESISTOR
F.RESISTOR		:	FUSE RESISTOR
M.RESISTOR		:	METAL OXIDE RESISTOR
M.RESISTOR	CH	:	METAL OXIDE CHIP RESISTOR
S.RESISTOR		:	SOLID RESISTOR
V.RESISTOR		:	VARIABLE RESISTOR
W.RESISTOR		:	WIRE WOUND RESISTOR
COMBI. TR-R		:	TRANSISTOR-RESISTOR COMBINATION PARTS
COMBI. R-R		:	RESISTOR-RESISTOR COMBINATION PARTS
COMBI. C-R		:	CAPACITOR-RESISTOR COMBINATION PARTS
COMBI. C-R-R		:	CAPACITOR-RESISTOR-COIL COMBINATION PARTS
P.C. BOARD		:	PRINTED CIRCUIT BOARD
W/COMPONENT		:	WITH COMPONENT

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ERVICING FIXTURES & TOOLS

AJ-D450/440PE

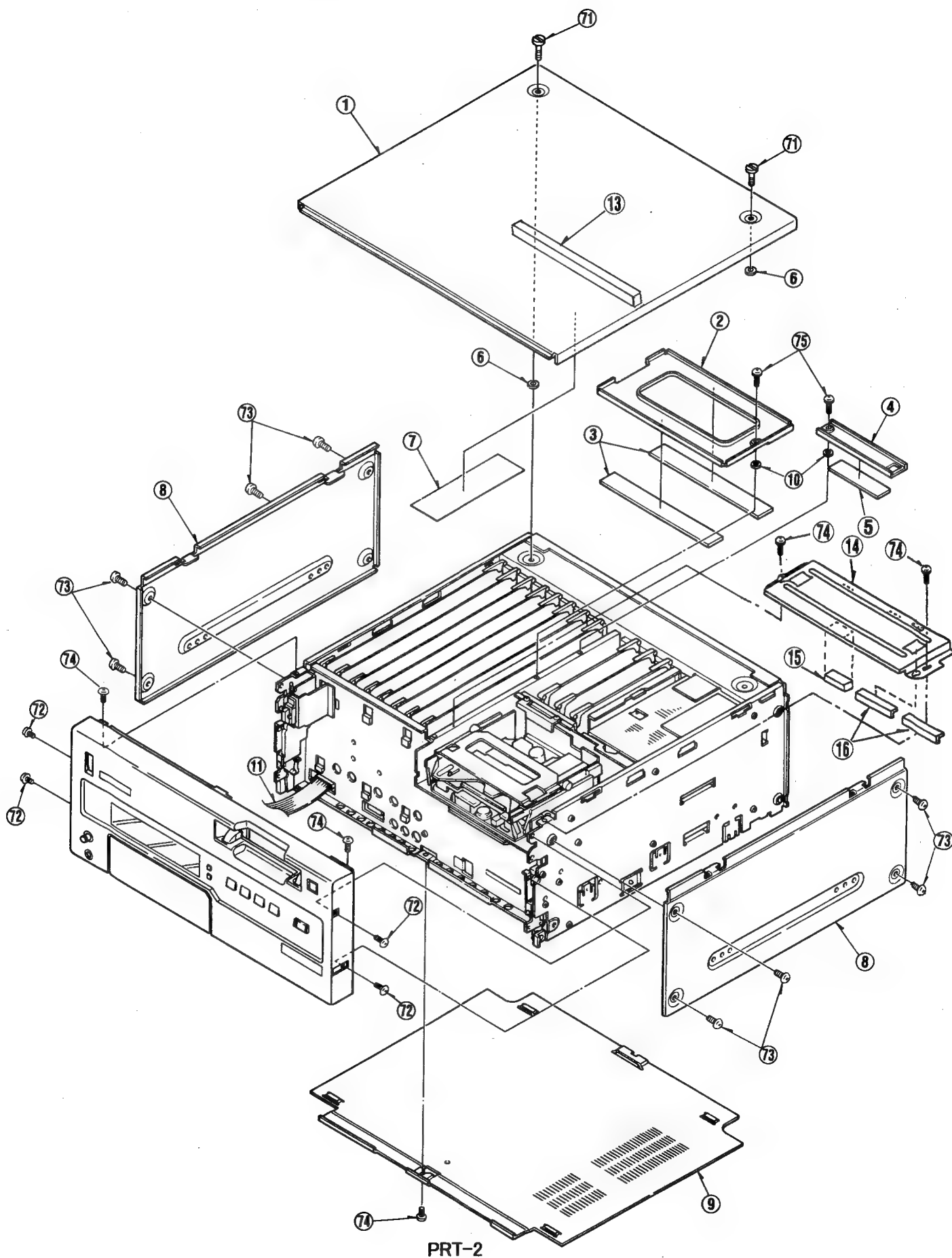
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	VFK1145	BACK TENSION METER	1		42	VFK1248A	FLASH ROM VERSION UP SOFT	1	
2	VFK1149	POST DRIVER	1		43	VFK1304A	ROM REWRITER	1	
3	VFK71	DIAL TORQUE GAUGE (150G)	1		44	VFK1305	120P EXTENDER	1	
4	VFK1191	DIAL TORQUE GAUGE (45G)	1		45	VFK1307	70P EXTENDER	1	
5	VFK1152	DIAL TORQUE GAUGE ADAPTOR	1		46	VFK1308	52P EXTENDER	1	
6	VFK0357	ECCENTRIC SCREWDRIER	1		47	VFK0369	TWEEZERS	1	
7	VFL1154	POST HEIGHT FIXTURE	1		48	VFK0371	RADIO PRIER	1	
8	VFK1153	MECH. NEUTRAL PLATE	1		49	VFK0372	CUTTER PRIER	1	
9	VFK0908	OIL	1		50	VFK0338	TRIMMER ADJUSTMENT DRIVER	1	
10	VFK1155	REV POSITION TOOL	1		51	VFK0337	PHILIPS DRIVER	1	
11	VFK1156	PLAY POSITION TOOL	1						
12	VFK1208	NEUTRAL POSITION TOOL	1						
13	VFK1150	NUT DRIVER (5.5MM)	1						
14	VFK1151	NUT DRIVER (2.5MM)	1						
15	VFK1188	DIAL TENSION GAUGE (30G)	1						
16	VFK0948A	CHECK LIGHT	1						
17	VFK0749	FROIRAL GREASE	1						
18	MOR265	MORLYTONE GREASE	1						
19	VFK1146	PHILIPS DRIVER (FINE)	1						
20	VFK1147	PHILIPS DRIVER (FINE)	1						
21	VFK1148	HEX. DRIVER (1.5)	1						
22	VFK1178	HEX. DRIVER (0.89)	1						
23	VFK1179	HEX. DRIVER (0.71)	1						
24	VFK1190	HEX. WRENCH	1						
25	VFK1209	TORQUE DRIVER	1						
26	VFK1375	POST AXIS DRIVER (1.5MM)	1						
27	VFK1300	A/D BOARD	1						
28	VFM3580KI	ALIGNMENT TAPE (NO. 1)	1	FOR NTSC					
29	VFM3581KI	ALIGNMENT TAPE (NO. 2)	1	FOR NTSC					
30	VFM3582KI	ALIGNMENT TAPE (NO. 3)	1	FOR NTSC					
31	VFM3680KI	ALIGNMENT TAPE (NO. 1)	1	FOR PAL					
32	VFM3681KI	ALIGNMENT TAPE (NO. 2)	1	FOR PAL					
33	VFM3682KI	ALIGNMENT TAPE (NO. 3)	1	FOR PAL					
34	VFM3000E05	ALIGNMENT TAPE (DV LISTA)	1						
35	VFM3010E05	ALIGNMENT TAPE	1						
36	VFM3110E05	ALIGNMENT TAPE	1						
37	AJ-CL12MP	CLEANING TAPE	1						
38	VFK1481	LISTA SOFTWARE	1						
39	VFK1186	LISTA CABLE	1						
40	VFK1423	TAPE DET. SENSOR CASSETTE	1						
41	VZZ0085	CLEANING CROSS	1						

CASING PARTS ASSEMBLY

AJ-D450/4

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VGM1270	TOP PANEL	1						
2	VMP6138	P.C. BOARD PLATE L	1						
3	VMX2511	P.C. BOARD RUBBER CUSHION L	2						
4	VMP4885	P.C. BOARD PLATE S	1						
5	VMX2512	P.C. BOARD RUBBER CUSHION S	1						
6	VMX2510	SPACER	2						
7	VMZ2325	TOP PANEL BARRIER	1						
8	VGM1567	SIDE PANEL	2						
9	VKU0546	BOTTOM PLATE	1						
10	VMX1558	NYLON WASHER	2						
11	VEE9641	FRONT CABLE	1						
12	VMX2582	WASHER	2						
13	VMT0785	DUST PROOF CUSHION	1						
14	VMP5265	CARRIGE SUPPORT METAL	1						
15	VMT0493	CUSHION	1						
16	VMT0776	GASKET (D)	1						
17	VMT0800	GASKET	7						
18	VMT0509	CONDUCTIVE CUSHION D	1						
19	VMT0884	GASKET (O)	1	FOR AJ-D450E/D440E					
71	VMD0775	SCREW	2						
72	XSB3+8FZ	SCREW	8						
73	XSB4+8FC	SCREW	8						
74	XTV3+6F	SCREW	5						
75	XYN3+K8	SCREW	2						

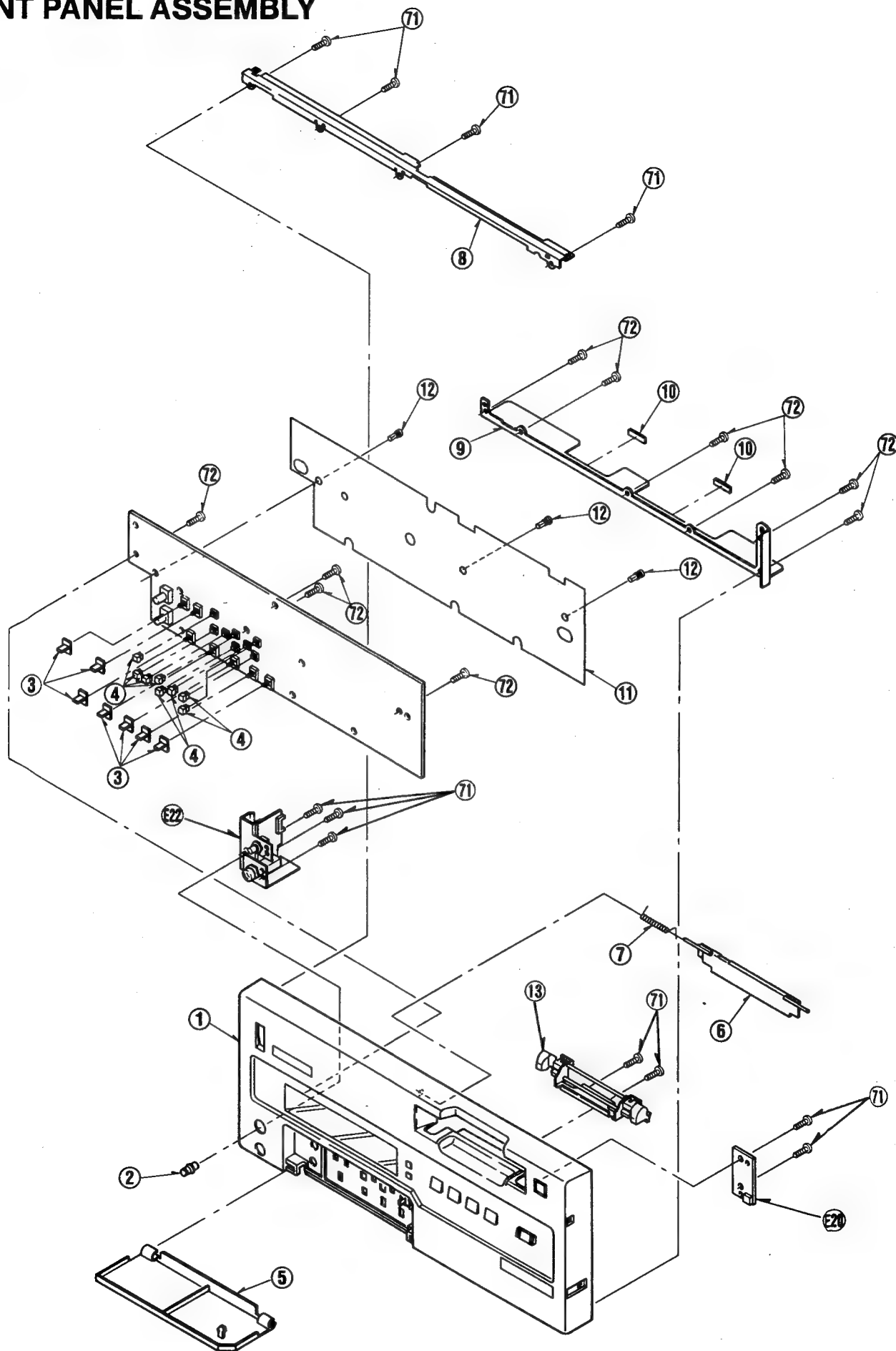
CASING PARTS ASSEMBLY



AJ-D450/44

PRT-3

FRONT PANEL ASSEMBLY



Components identified with the mark Δ have the special characteristics for s
When replacing any of these components, use only the same type.

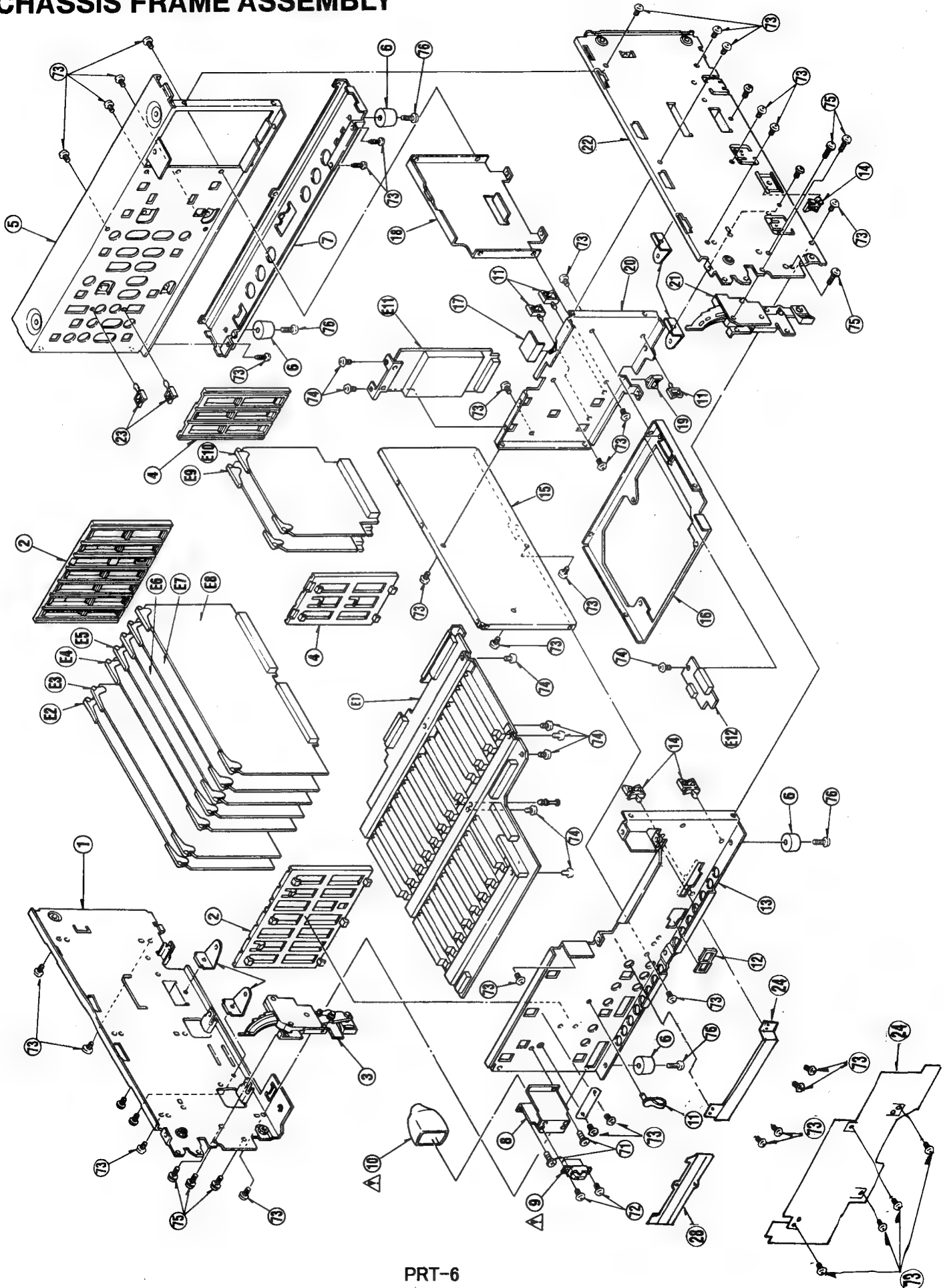
CHASSIS FRAME ASSEMBLY

AJ-D450/4

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VMP6022	LEFT SIDE FRAME	1						
2	VG04011	P.C.BOARD GUIDE RAIL A	2						
3	VY01259	ROTARY BRACKET L	1						
4	VG04012	P.C.BOARD GUIDE RAIL B	2						
5	VMP5640	REAR FRAME	1						
6	VKA0117	PLASTIC FOOT	4						
7	VMP6020	BOTTOM FRAME	1						
8	VMP4881	SW BRACKET	1						
Δ 9	EST15372T	POWER SWITCH	1	FOR AJ-D450P/D440P					
Δ 9	EST15367S	POWER SWITCH	1	FOR AJ-D450E/D440E					
Δ 10	VMZ0580	SW COVER	1						
11	VJF0285	WIRE LOCKING SADDLE	4						
12	VJF1259	EDGE HOLDER	1						
13	VMP6023	FRONT FRAME	1						
14	VJF0004	WIRE SADDLE	3						
15	VMP4873	CENTER FRAME	1						
16	VXA5550	MECHANISM FRAME ASS'Y	1						
17	VG0715	FPC BARRIER	1						
18	VMP4874	CENTER SUB FRAME	1						
19	VMP5285	BOTTOM FRAME ANGLE	4						
20	VMP4875	MIDDLE FRAME	1						
21	VY01258	ROTARY BRACKET R	1						
22	VMP6021	SIDE FRAME R	1						
23	VJF0384	CLAMPER	2						
24	VMP5264	FPC SHIELD COVER	1						
25	VG0714	BARRIER (A)	1						
71	VHD5013	SCREW	2						
72	XTN3+6F	SCREW	2						
73	XTV3+6F	SCREW	31						
74	XTV3+6FFR	SCREW	9						
76	XYNV3+K12S	SCREW	4						
E1	VEP80A11B	MOTHER C.B.A.	1						
E2	VEP82105F	F1 SERVO P.C.BOARD	1	FOR AJ-D450P/D440P					
E2	VEP82105G	MOTHER P.C.BOARD	1	FOR AJ-D450E/D440E					
E3	VEP86146M	F2 SYSCON P.C.BOARD	1	FOR AJ-D450P					
E3	VEP86146N	F2 SYSCON P.C.BOARD	1	FOR AJ-D450E					
E3	VEP86146P	F2 SYSCON P.C.BOARD	1	FOR AJ-D440P					
E3	VEP86146Q	F2 SYSCON P.C.BOARD	1	FOR AJ-D440E					
E4	VEP83352C	F4 V OUT P.C.BOARD	1	FOR AJ-D450P/D440P					
E4	VEP83352B	F4 V OUT P.C.BOARD	1	FOR AJ-D450E/D440E					
E5	VEP83353F	F5 REC PB P.C.BOARD	1	FOR AJ-D450P/D440P					
E5	VEP83353E	F5 REC PB P.C.BOARD	1	FOR AJ-D450E/D440E					
E6	VEP83397B	F6 V IN P.C.BOARD	1	FOR AJ-D450P					
E6	VEP83398A	F6 V IN P.C.BOARD	1	FOR AJ-D450E					
E7	VEP84292A	F7 A PROC P.C.BOARD	1	FOR AJ-D450P/D450E					
E7	VEP84292D	F7 A PROC P.C.BOARD	1	FOR AJ-D440P/D440E					
E8	VEP84293E	F8 ADDA/CUE P.C.BOARD	1	FOR AJ-D450P/D440P					
E8	VEP84293B	F8 ADDA/CUE P.C.BOARD	1	FOR AJ-D450E/D440E					
E9	VEP85048A	H3 EQ P.C.BOARD	1						
E10	VEP85049B	H4 AMP P.C.BOARD	1						
E11	VEP85151B	HEAD BUFF P.C.BOARD	1						
E12	VEP80991A	AC HEAD IF P.C.BOARD	1						

Components identified with the mark Δ have the special characteristics for safety.
When replacing any of these components, use only the same type.

CHASSIS FRAME ASSEMBLY



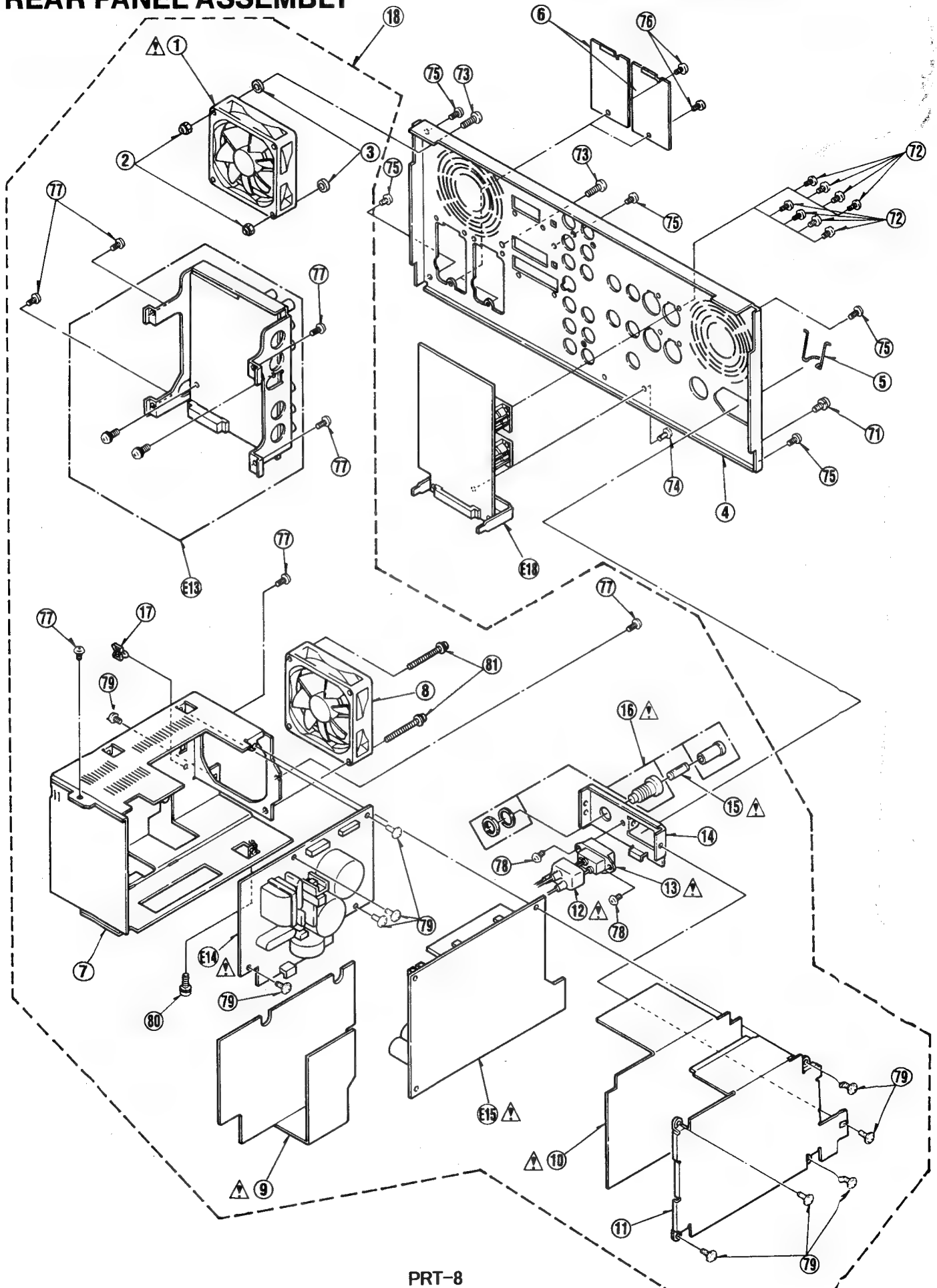
AJ-D450/44

Components identified with the mark have the special characteristics for safety. When replacing any of these components, use only the same type.

PRT-7

Components identified with the mark Δ have the special characteristics for safety.
When replacing any of these components, use only the same type.

REAR PANEL ASSEMBLY




Components identified with the mark Δ have the special characteristics for
When replacing any of these components, use only the same type.

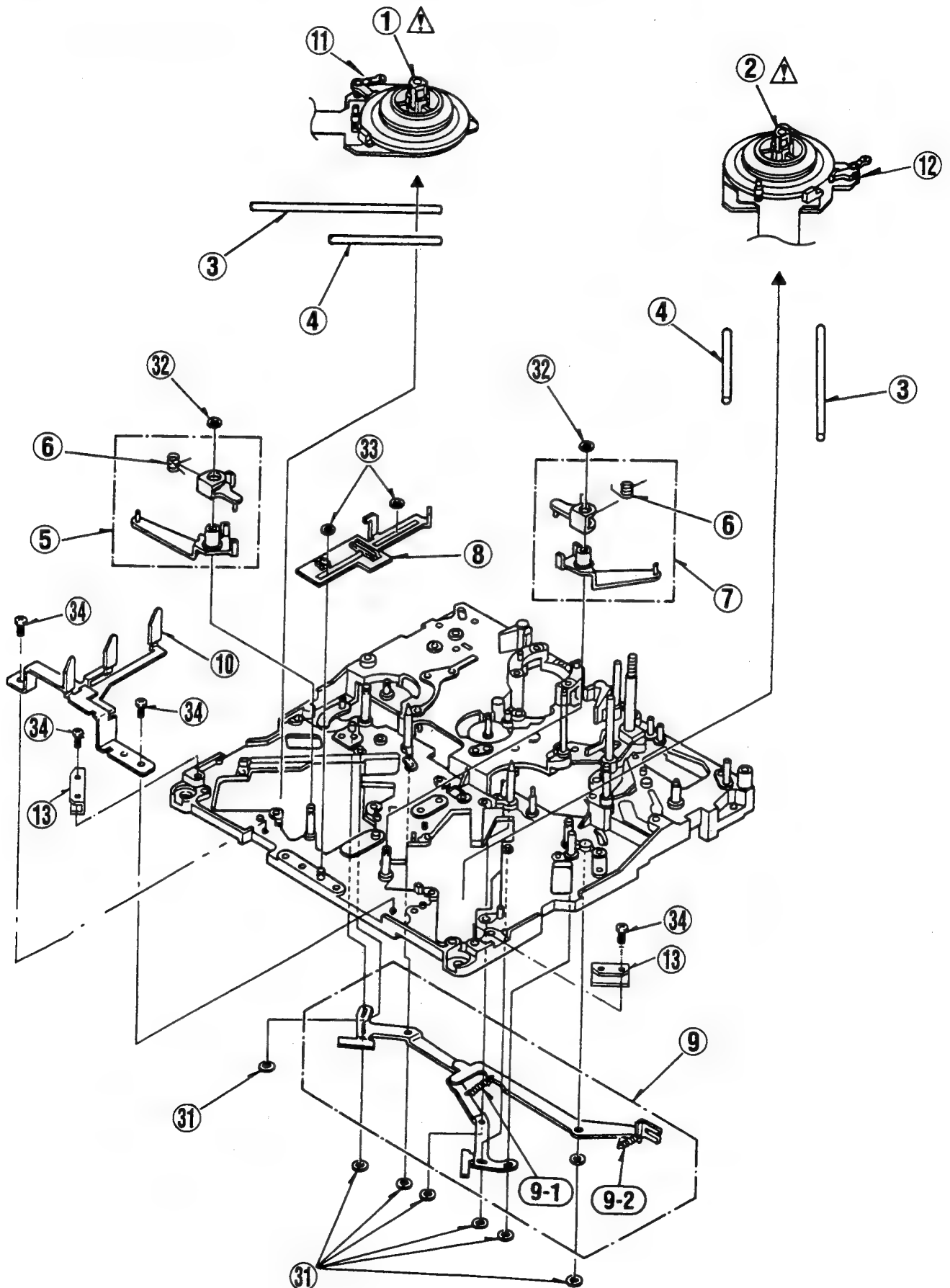
MECHANICAL CHASSIS ASSEMBLY(1)

AJ-D450/4

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VEM0686	S REEL MOTOR A ASS'Y	1	(M)					
2	VEM0687	T REEL MOTOR A ASS'Y	1	(M)					
3	VMS5923	REEL OUTER RAIL	2						
4	VMS5924	REEL INNER RAIL	2						
5	VXL2589	S BASE DRIVE ARM ASS'Y	1						
6	VMB2944	CHARGE SPRING	2						
7	VXL2590	T BASE DRIVE ARM ASS'Y	1						
8	VXA5625	SLIDE ROD ASS'Y	1						
9	VXL2597	M STOPPER DRIVE ARM ASS'Y	1						
9-1	VMB2955	M STOPPER SPRING (1)	1						
9-2	VMB3017	M STOPPER SPRING (2)	1						
10	VXA6174	L-M BRAKE RELEASE ASS'Y	1						
11	VXZ0439	S BRAKE ARM ASS'Y	1						
12	VXZ0440	T BRAKE ARM ASS'Y	1						
13	VMZ2603	REEL FLEX COVER	2						
31	VMX1061	WASHER	7						
32	VMX1079	CUT WASHER	2						
33	VMX1394	CUT WASHER	2						
34	XON2+CF3	SCREW	4						

Components identified with the mark  have the special characteristics for safety.
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MECHANICAL CHASSIS ASSEMBLY(1)



Components identified with the mark Δ have the special characteristics for
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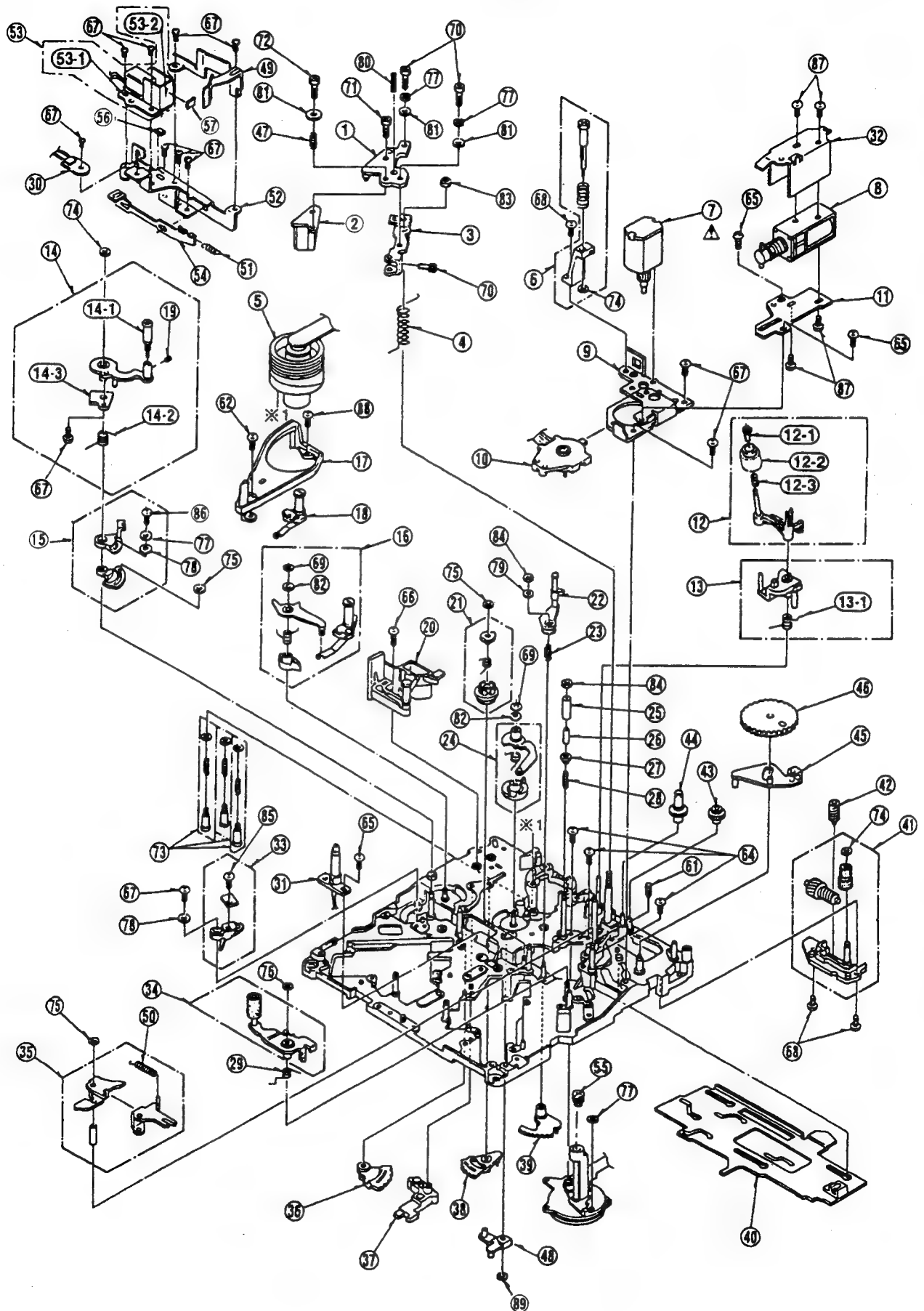
MECHANICAL CHASSIS ASSEMBLY(2)

AJ-D450/4

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
1	VXA5554	A/C HEAD BASE (1) ASS'Y	1		67	XQN2+CF3	SCREW	12	
2	VED0419	A/C HEAD	1 (M)		68	XQN2+CF4	SCREW	3	
3	VXA6067	A/C HEAD BASE (2) ASS'Y	1		69	XUC12FP	E-RING	2	
4	VMB2935	A/C HEAD HIGHT SPRING	1		70	XVE2B4FZ	HEX SCREW	3	
5	VEG1498	CYLINDER UNIT	1 (M)		71	XVE2B6FP	HEX SCREW	1	
6	VXA5715	EMERGENCY SHIFT HOLDER ASS'Y	1		72	XVE2B12FP	HEX SCREW	1	
7	VEM0645	LOADING MOTOR (1)A ASS'Y	1 (M)		73	VX00439	SCREW	3	
8	VSJ0227	PINCH SOLENOID	1 (M)		74	VMD0967	CUT WASHER	3	
9	VXA5584	MOTOR ANGLE ASS'Y	1		75	VMD1061	WASHER	3	
10	VES0918	MODE SW ASS'Y	1 (M)		76	VMD1079	CUT WASHER	1	
11	VMA0A35	PINCH SOLENOID BASE	1		77	XWA2B	WASHER	4	
12	VXL2924	CLEANING ARM A ASS'Y	1 (M)		78	XWE2	WASHER	2	
12-1	VMD2150	CLEANER ROLLER HOLDER	1		79	XWE16VM	WASHER	1	
12-2	VXP1963	CLEANER ROLLER ASS'Y	1		80	XXE2A6FP	HEX SCREW	1	
12-3	VMB3114	CLEANER ROLLER SPRING	1		81	XWG2	WASHER	3	
13	VXL2870	T2 ARM ASS'Y	1		82	XWGV15Z32G	WASHER	2	
13-1	VMB3304	T2 ARM SPRING	1		83	VHD0045	NYLON NUT	1	
14	VXL2831	TENSION ARM A ASS'Y	1 (M)		84	VHN0312	NUT	2	
14-1	VXP1761	TENSION ROLLER	1		85	XQN2+A03.5FZ	SCREW	1	
14-2	VMB3220	TENSION LEG SPRING	1		86	XQN2+AJ5	SCREW	1	
14-3	VXA6173	MAGNET HOLDER ASS'Y	1		87	XQN2+A1.5	SCREW	4	
15	VXA5791	TENSION LEG SPRING HOOK ASS'Y	1		88	XQN2+A4	SCREW	1	
16	VXL2709	S1 LOADING ARM ASS'Y	1 (M)		89	VMD1394	CUT WASHER	1	
17	VMD3731	LOADING RAIL	1		*	VXY1431Z1	MECHANISM	1	
18	VXA6378	T1 BOAT ASS'Y	1 (M)						
19	VHD0561	HEX SCREW	1						
20	VXA6052	S POST BASE A ASS'Y	1 (M)						
21	VXP1683	T4 CONNECTION GEAR ASS'Y	1						
22	VXL2772	T4 ARM ASS'Y	1						
23	VMB2950	T4 THRUST SPRING	1						
24	VXL2898	T LOADING ARM ASS'Y	1 (M)						
25	VMS5906	T3 UPPER FRANGE	1						
26	VMS5905	T3 SLEEVE	1						
27	VMS5904	T3 LOWER FRANGE	1						
28	VMB2929	T3 SPRING	1						
29	VMB2933	PINCH RELEASE SPRING	1						
30	VEK7927	INSULATION SENSOR	1						
31	VEK7691	LED HOLDER P.C. BOARD	1						
32	VMA9411	PINCH SOLENOID ANGLE	1						
33	VXA5820	TENSION SENSOR ASS'Y	1						
34	VXL2835	PINCH ARM ASS'Y	1 (M)						
35	VXL2588	PINCH GUIDE ARM ASS'Y	1						
36	VXA5570	T SECTOR GEAR ASS'Y	1						
37	VXL2838	TENSION LEG. GUIDE ARM	1						
38	VXA5567	S SECTOR GEAR ASS'Y	1						
39	VXA5564	T4 SECTOR GEAR ASS'Y	1						
40	VXA6348	MAIN ROD ASS'Y	1						
41	VXA5627	THRUST SHAFT HOLDER ASS'Y	1						
42	VDG1166	MOTOR WARM GEAR	1						
43	VDG1268	MOTOR EMERGENCY GEAR A(A)	1						
44	VDG1267	MOTOR EMERGENCY GEAR B(A)	1						
45	VXL2889	MAIN CAM ARM ASS'Y	1						
46	VDG1168	MAIN CAM GEAR	1 (M)						
47	VMB2937	A/C HEAD ADJUST SPRING	1						
48	VXL2600	EJECT ARM ASS'Y	1						
49	VMD3475	T1 GUIDE ASS'Y	1						
50	VMB2934	SPRING	1						
51	VMB3051	CLEANER RETURN SPRING	1						
52	VXA6077	CLEANER BASE 1 ASS'Y	1						
53	VXA6078	CLEANER SOLENOID ASS'Y	1						
53-1	VSJ0226	CLEANER SOLENOID	1 (M)						
53-2	VMA9877	CLEANER SOLENOID BASE	1						
54	VMM0429	CLEANER INTERLOCK	1						
55	VX00556	THRUST SCREW ASS'Y	1 (M)						
56	VMT0871	SILENCER A	1						
57	VMT0872	SILENCER B	1						
61	VHD0356	SCREW	1						
62	XQN2+A3	SCREW	1						
64	XQN2+A35FZ	SCREW	3						
65	XQN2+AM2	SCREW	3						
66	XQN2+AM4	SCREW	1						

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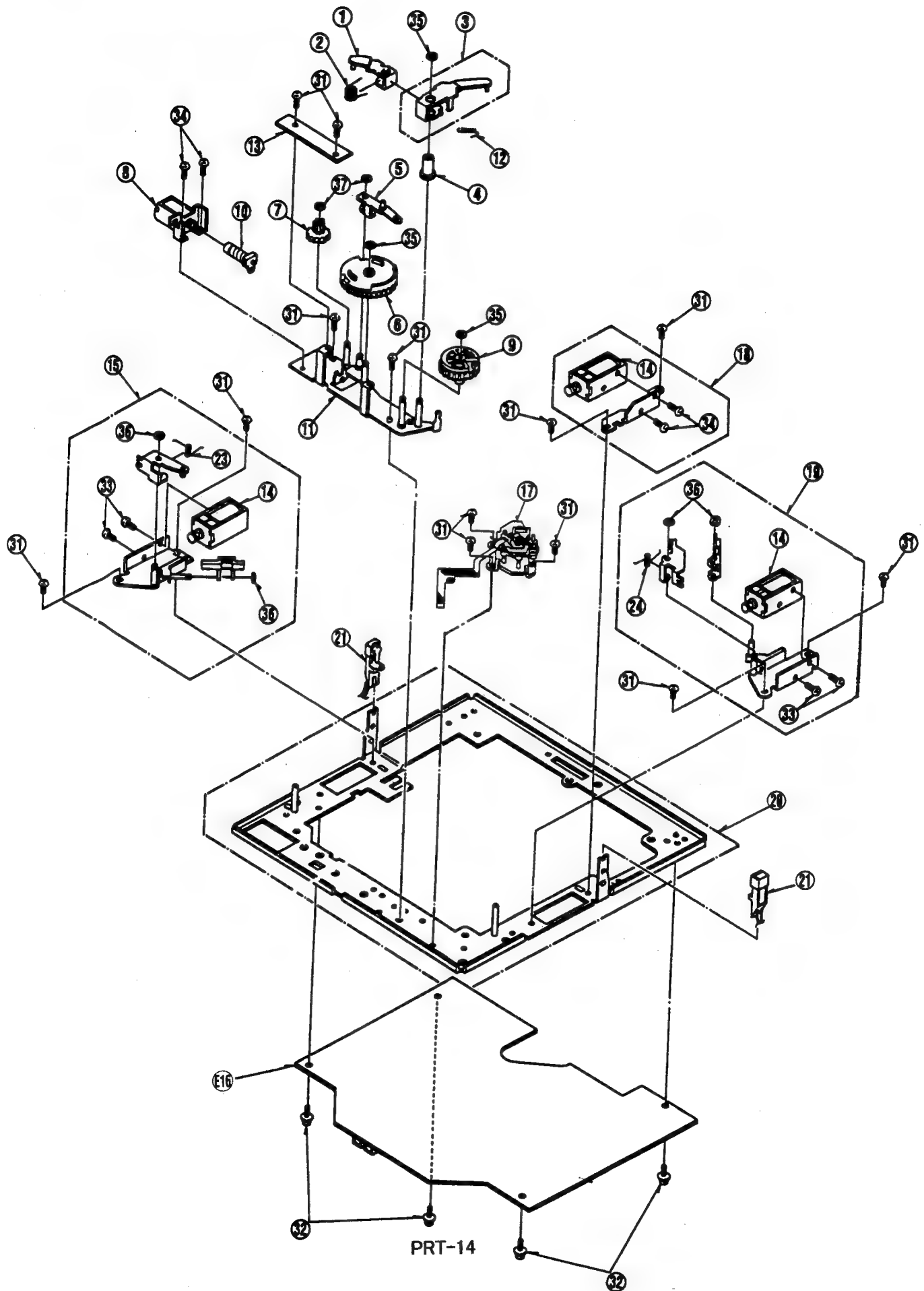
MECHANICAL CHASSIS ASSEMBLY(2)



AJ-D450/4

PRT-13

SUB CHASSIS ASSEMBLY

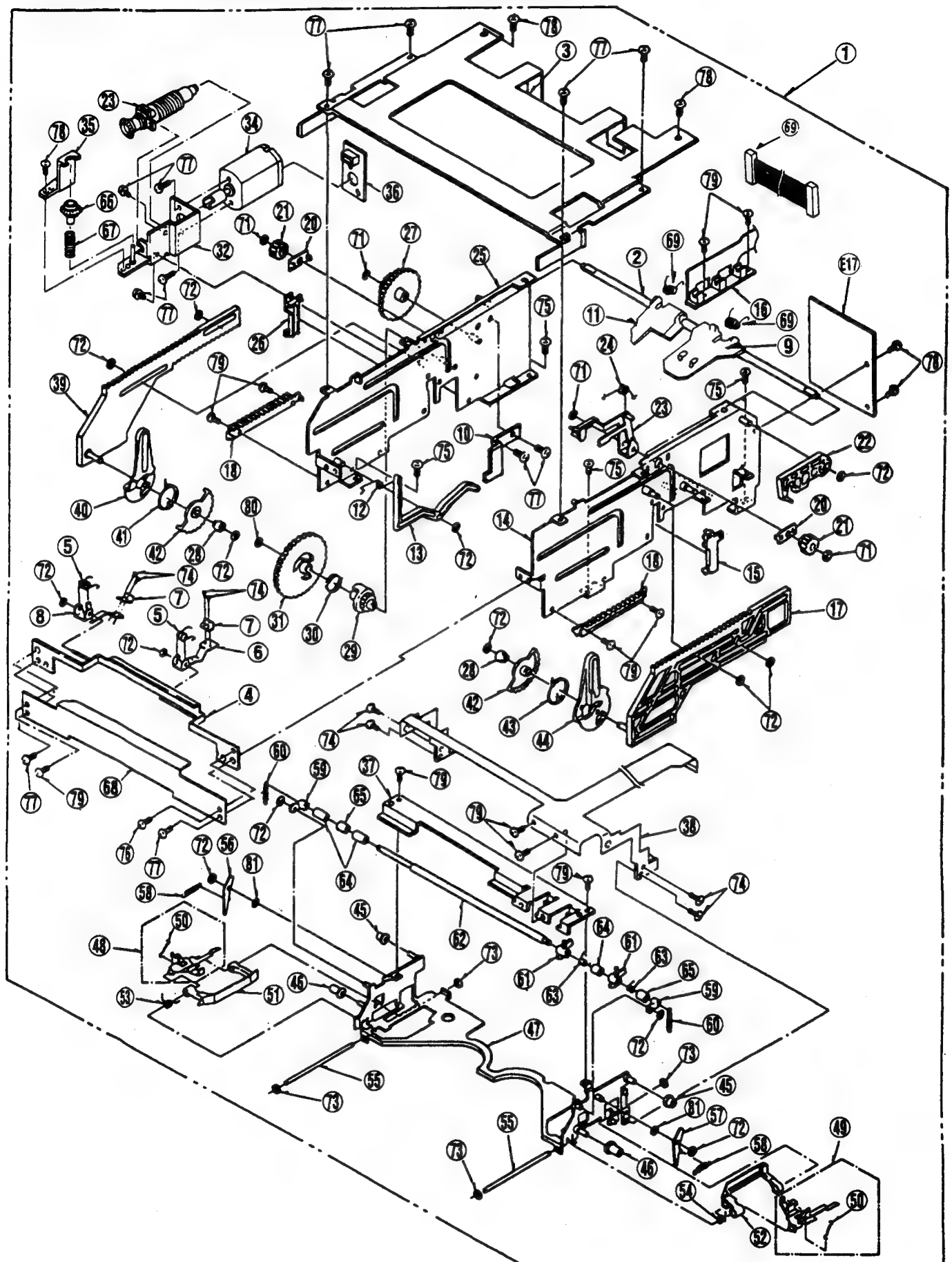



CASSETTE COMPARTMENT ASSEMBLY

AJ-D450/4

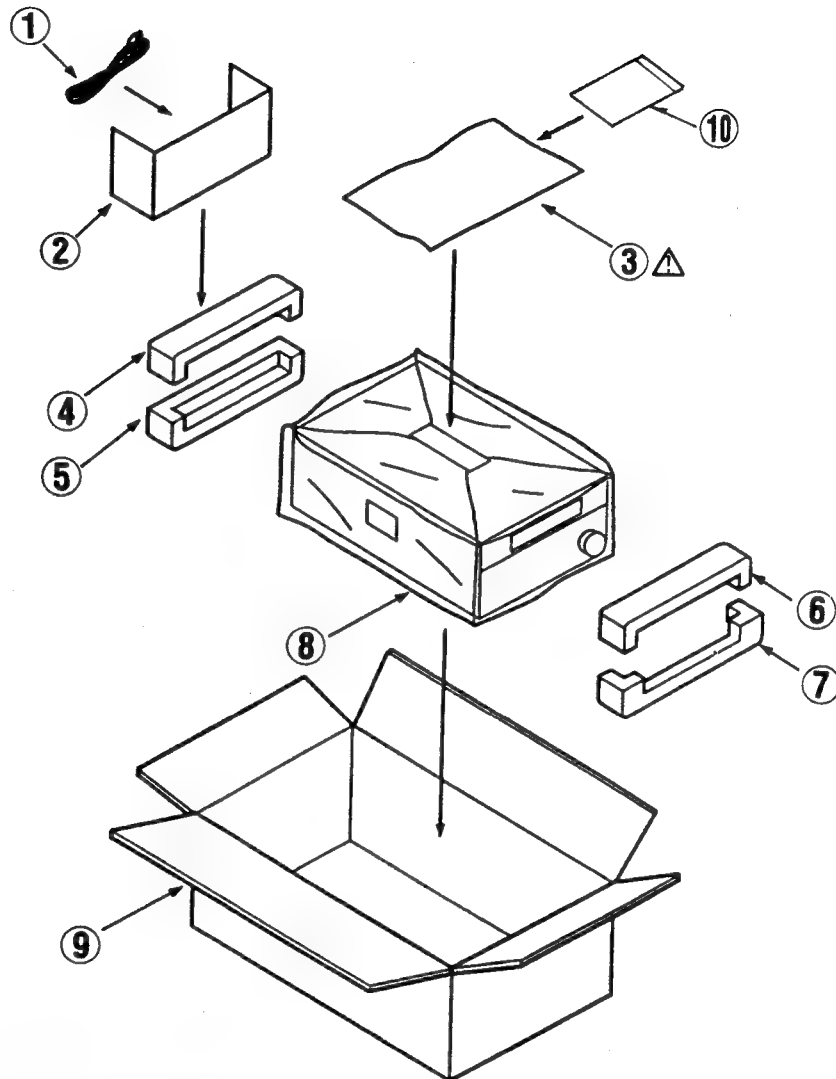
Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	VXA6593	CASSETTE COMPARTMENT	1	(M)	76	XQN2+A2	SCREW	2	
2	VMS5865	MAIN SHAFT	1		77	VHD1323	SCREW	12	
3	VMA9849	TOP PLATE	1		78	XQN2+A3	SCREW	5	
4	VXA5761	FRONT GUIDE 1 ASS'Y	1		79	LMHD16064	SCREW	10	
5	VMB3075	M GUIDE SPRING	2		80	XWGV2Y4G	WASHER	2	
6	VML3191	M GUIDE RIGHT LEVER	1		81	XWGV2Z5G	WASHER	2	
7	VML3192	M FRONT GUIDE	2						
8	VML3190	M GUIDE LEFT LEVER	1						
9	VML3397	CASSETTE PROTECT PLATE	1						
10	VMA9760	L OPENER	1		E17	VEP80856A	CARRIGE P. C. BOARD	1	
12	VMB2926	SPRING	1						
13	VML2A50	BLINDER PANEL OPENER	1						
14	VXA6074	R SIDE PLATE 1 ASS'Y	1						
15	VML3282	SUB RAIL (R)	1						
16	VEK7695	SIDE FLEXIBLE	1						
17	VXA5766	MAIN RACK R ASS'Y	1						
18	VDG1156	WIPER RACK	2						
20	VDB1395	MAIN SHAFT ANGLE	2						
21	VDG1412	INTERLOCK GEAR	2						
22	VML3193	OPENER DRIVE ARM	1						
23	VXL2692	OPENER ANGLE ASS'Y	1						
24	VMB2979	SPRING	1						
25	VXA6072	SIDE PLATE L 1 ASS'Y	1						
26	VML3281	SUB RAIL (L)	1						
27	VDG1413	INTERMEDIATE GEAR	1						
28	VDP1643	WIPER ROLLER	2						
29	VDG1414	CLUTCH GEAR	1						
30	VMB2980	CLUTCH SPRING	1						
31	VDG1236	WORM WHEEL	1						
32	VXA5848	MOTOR ANGLE (A) ASS'Y	1						
33	VXP1797	E. E SLOT IN WORM ASS'Y	1						
34	VXA5597	MOTOR ASS'Y	1	(M)					
35	VMA9673	EMERGENCY ANGLE	1						
36	VEK7793	MOTOR P. C. BOARD	1						
37	VMA9668	HOLDER PLATE	1						
38	VEK7715	HOLDER FLEXIBLE ASS'Y	1						
39	VXA6075	MAIN RACK (L) ASS'Y	1						
40	VML3485	WIPER ARM L	1						
41	VMB3391	WIPER SPRING L	1						
42	VDG1163	WIPER GEAR	2						
43	VMB3390	WIPER SPRING R	1						
44	VML3484	WIPER ARM R	1						
45	VDP1642	CASSETTE GUIDE ROLLER (2)	2						
46	VDP1641	CASSETTE GUIDE ROLLER (1)	2						
47	VXA5757	CASSETTE HOLDER 1 ASS'Y	1						
48	VXA5758	ROD L	1						
49	VXA5759	ROD R	1						
50	VMB3064	SLIDE SPRING	2						
51	VML3249	SIDE GUIDE L	1						
52	VML3250	SIDE GUIDE R	1						
53	VMB3061	SLIDE GUIDE SPRING L	1						
54	VMB3062	SLIDE GUIDE SPRING R	1						
55	VMS6666	KICK OFF ROD SHAFT	2						
56	VML2A54	KICK OFF ARM L	1						
57	VML2A55	KICK OFF ARM R	1						
58	VMB2928	KICK OFF SPRING	2						
59	VML2A53	CASSETTE HOLDER ARM	2						
60	VMB2927	CASSETTE HOLDER SPRING	2						
61	VMX2833	M-L DETECTION ROLLER	2						
62	VMS5882	CASSETTE HOLDER SHAFT	1						
63	VMB3253	M-L DETECTION SPRING	2						
64	VMX2559	CASSETTE PRESSURE ROLLER(2)	3						
65	VMX2524	CASSETTE PRESSURE ROLLER(1)	1						
66	VDG1246	EMERGENCY GEAR	1						
67	VMB3109	EMERGENCY SPRING	1						
68	VMZ2661	FRONT GUIDE COVER	1						
71	VMX0653	CUT WASHER	4						
72	VMX0967	CUT WASHER	14						
73	VMX1061	WASHER	4						
74	XQN16+A2	SCREW	8						
75	XQN2+CF3	SCREW	4						

CASSETTE COMPARTMENT ASSEMBLY








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PACKING PARTS ASSEMBLY



PACKING PARTS ASSEMBLY

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
 1	VJA0488	POWER CODE	1	FOR AJ-D450P/D440P					
 1	VJA0774	POWER CODE	1	FOR AJ-D450E/D440E					
 1	VJA0775	POWER CODE	1	FOR AJ-D450E/D440E					
2	VPN4305	ACCESSORY PAD	1						
 3	VQT6816	OPERATING INSTRUCTIONS	1	FOR AJ-D450P/D440P					
 3	VQT8152	OPERATING INSTRUCTIONS	1	FOR AJ-D450E/D440E					
4	VPN4302	CUSHION UL	1						
5	VPN4304	CUSHION LL	1						
6	VPN4606	CUSHION UR	1						
7	VPN4607	CUSHION LR	1						
8	VPF0277	POLYETHYLENE BAG	1	FOR AJ-D450P/D440P					
8	VPF0673	POLYETHYLENE BAG	1	FOR AJ-D450E/D440E					
9	VP69951	PACKING CASE	1	FOR AJ-D450P					
9	VP60A15	PACKING CASE	1	FOR AJ-D450E					
9	VP69953	PACKING CASE	1	FOR AJ-D440P					
9	VP60A14	PACKING CASE	1	FOR AJ-D440E					
10	VXF0159	EMERGENCY EJECT ASS'Y	1						

ELECTRICAL REPLACEMENT PARTS LIST

AJ-D450/440PE

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E1	VEP80A11A	MOTHER P.C.BOARD	1	(RTL)	■ E1	VEP80A11A	MOTHER P.C.BOARD	1	(RTL)
■ E2	VEP82105F	F1 SERV0 P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P	P001-16	VJS3814	CONNECTOR (FEMALE)	16	
■ E2	VEP82105G	F1 SERV0 P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E	P019, 20	VJS3814	CONNECTOR (FEMALE)	2	
■ E3	VEP86146M	F2 SYSCON P.C.BOARD	1	(RTL) FOR AJ-D450P	P021	VJP3095	CONNECTOR (MALE)	1	
■ E3	VEP86146N	F2 SYSCON P.C.BOARD	1	(RTL) FOR AJ-D450E	P022	VJP3091	CONNECTOR (MALE)	1	
■ E3	VEP86146P	F2 SYSCON P.C.BOARD	1	(RTL) FOR AJ-D440P	P023	VJP2891A030	CONNECTOR (MALE)	1	
■ E3	VEP86146Q	F2 SYSCON P.C.BOARD	1	(RTL) FOR AJ-D440E	P024	VJP3418A080	CONNECTOR (MALE)	1	
■ E4	VEP83352C	F4 V OUT P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P	P025	VJP2824B003	CONNECTOR (MALE)	1	
■ E4	VEP83352B	F4 V OUT P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E	P026	VJP2824B006	CONNECTOR (MALE)	6P	1
■ E5	VEP83353D	F5 REC PB P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P	P027	VJP2824B008	CONNECTOR (MALE)	1	
■ E5	VEP83353E	F5 REC PB P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E	P029, 30	VJS3375B060	CONNECTOR (FEMALE)	2	
■ E6	VEP83397B	F6 V IN P.C.BOARD	1	(RTL) FOR AJ-D450P	P031	VJP3080	CONNECTOR (MALE)	1	
■ E6	VEP83398A	F6 V IN P.C.BOARD	1	(RTL) FOR AJ-D450E	P032	VJP1230T	CONNECTOR (MALE)	3P	1
■ E7	VEP84292A	F7 A PROC P.C.BOARD	1	(RTL) FOR AJ-D450P/D450E	P033	VJP3375A060	CONNECTOR (MALE)	1	
■ E7	VEP84292D	F7 A PROC P.C.BOARD	1	(RTL) FOR AJ-D440P/D440E	P036	VJP3090	CONNECTOR (MALE)	1	
■ E8	VEP84293A	F8 ADDA/CUE P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P			MISCELLANEOUS		
■ E8	VEP84293B	F8 ADDA/CUE P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E			VMP5641	MOTHER ANGLE (A)	1
■ E9	VEP85048A	H3 EQ P.C.BOARD	1	(RTL)			VMP5642	MOTHER ANGLE (B)	1
■ E10	VEP85049A	H4 RF AMP P.C.BOARD	1	(RTL)			VMP5643	MOTHER ANGLE (C)	1
■ E11	VEP85151A	HEAD BUFF P.C.BOARD	1	(RTL)			XYE3+EF8FZ	SCREW	10
■ E12	VEP80991A	AC HEAD I/F P.C.BOARD	1	(RTL)			XTV26+6F	SCREW	2
■ E13	VEP83224B	V/S JACK P.C.BOARD	1	(RTL) AJ-D450P/D450E	■ E2	VEP82105F	F1 SERV0 P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P
■ E13	VEP83417C	V/S JACK P.C.BOARD	1	(RTL) AJ-D440P/D440E	C1, C2	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
■ E14	VEP81074A	POWER 1 P.C.BOARD	1	(RTL) AJ-D450P/D440P	C3	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
■ E14	VEP81183A	POWER 1 P.C.BOARD	1	(RTL) AJ-D450E/D440E	C4	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
■ E15	VEP81075A	POWER 2 P.C.BOARD	1	(RTL) FOR AJ-D450P/D440P	C5, C6	ECEVICV220Q	E. CAPACITOR CH 16V 22U	2	
■ E15	VEP81184B	POWER 2 P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E	C7	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
■ E16	VEP82216B	MECH I/F P.C.BOARD	1	(RTL)	C8, C9	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
■ E17	VEP80856A	CARRIGE P.C.BOARD	1	(RTL)	C10	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1	
■ E18	VEP84291A	A JACK P.C.BOARD	1	(RTL) FOR AJ-D450P/D450E	C11, 12	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
■ E18	VEP84291E	A JACK P.C.BOARD	1	(RTL) FOR AJ-D440P/D440E	C13	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
■ E19	VEP80A12A	SUB JACK P.C.BOARD	1	(RTL) FOR AJ-D450P/D450E	C14	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
■ E19	VEP80A12B	SUB JACK P.C.BOARD	1	(RTL) FOR AJ-D440P/D440E	C15	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
■ E20	VEP80A09A	EJECT P.C.BOARD	1	(RTL)	C30-34	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	5	
■ E21	VEP86256A	FRONT CPU P.C.BOARD	1	(RTL) FOR AJ-D450P/D450E	C35	ECEVIEV330Q	E. CAPACITOR CH 25V 33U	1	
■ E21	VEP86256B	FRONT CPU P.C.BOARD	1	(RTL) FOR AJ-D440P/D440E	C36-38	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
■ E22	VEP80A10A	HEAD PHONE P.C.BOARD	1	(RTL)	C39	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1	
■ E23	VEP80A58A	POWER CONNECTION P.C.BOARD	1	(RTL) FOR AJ-D450E/D440E	C40, 41	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	2	
					C42, 43	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C60, 61	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C63-74	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	12	
					C80, 81	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2	
					C82	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C83	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
					C84	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C85, 86	ECEVIEV330Q	E. CAPACITOR CH 25V 33U	2	
					C87	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C88	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1	
					C89, 90	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2	
					C91	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C92, 93	ECEVIEV330Q	E. CAPACITOR CH 25V 33U	2	
					C94, 95	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C120, 21	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2	
					C123	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C124, 25	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	2	
					C126	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C127, 28	ECEVIEV330Q	E. CAPACITOR CH 25V 33U	2	
					C129, 30	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C131, 32	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2	
					C133, 34	ECEVIEV330Q	E. CAPACITOR CH 25V 33U	2	
					C135	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C160, 61	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2	
					C162	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C163, 64	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	2		C412	ECUM1E224ZFN	C. CAPACITOR CH 25V 0.22U	1	
C165	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C413	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C166, 67	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	2		C414	ECUX1C105KBM	C. CAPACITOR CH 16V 1U	1	
C168, 69	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C415	ECUM1H152KBN	C. CAPACITOR CH 50V 1500P	1	
C170, 71	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2		C416-18	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
C172	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C419	ECEV1HV4R7Q	E. CAPACITOR CH 50V 4.7U	1	
C173, 74	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	2		C420	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C175	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C421	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C200	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		C422	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1	
C202, 03	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C423	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C204	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C424-27	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4	
C205-07	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		C428, 29	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2	
C208-10	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	3		C430	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C211	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C431	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C212, 13	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C432-34	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3	
C214	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C450	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1	
C215, 16	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		C451, 52	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C218	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C453, 54	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	2	
C230-32	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	3		C455	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C233-36	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4		C456	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C237	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C457	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C238	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C458, 59	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	2	
C239	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C460	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C240-49	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	10		C461	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C250, 51	ECUV1H120JCN	C. CAPACITOR CH 50V 12P	2		C462	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C260, 61	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C463	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C263-70	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	8		C464	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C280-86	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	7		C465	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C300-02	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		C466	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C303	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C467	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C304-08	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	5		C468, 69	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2	
C309	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C470	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C320, 21	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C471	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C322	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		C472	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	1	
C323	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		C473	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1	
C324	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		C474, 75	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	2	
C325, 26	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	2		C476	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C327, 28	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		C477, 78	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	2	
C329	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		C479	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C330	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C480	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1	
C331-34	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4		C481	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C335, 36	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	2		C482	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
C337	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C483	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C340	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		C484	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C341	ECAT1EXLV101	E. CAPACITOR 25V 100U	1		C485	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C342, 43	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C486	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C344	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		C487	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
C345	ECAT1EXLV101	E. CAPACITOR 25V 100U	1		C488	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
C346-48	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3		C489, 90	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2	
C349-53	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	5		C491	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C354	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C492	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
C355	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C493	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	1	
C356	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		C510	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C357	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		C511	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C358	ECAT1EXLV101	E. CAPACITOR 25V 100U	1		C512, 13	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C359	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		C514	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
C360	ECAT1EXLV101	E. CAPACITOR 25V 100U	1		C515	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C361	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		C516	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C362	ECAT1EXLV101	E. CAPACITOR 25V 100U	1		C517-19	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
C380, 81	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C520	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C382	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C521	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C383	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		C522, 23	ECEV1HV010Q	E. CAPACITOR CH 50V 1U	2	
C384	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C524	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C385, 86	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		C525	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C387	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C526	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C388	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		C527, 28	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C389	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C529	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C390	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C530-32	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
C391	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C533	ECEV1AV330Q	E. CAPACITOR CH 10V 33U	1	
C400	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		C534	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C401-03	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		C535	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C404-06	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	3		C536	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C407	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		C537	ECEV1HV010Q	E. CAPACITOR CH 50V 1U	1	
C408	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C538	ECEV1EV330Q	E. CAPACITOR CH 25V 33U	1	
C409-11	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3		C539	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C600, 01	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC236, 37	74AC74SJ	IC	2	
C602	ECCF1H330JC	C. CAPACITOR 50V 33P	1		IC238, 39	TC7WU04F	IC	2	
					IC240	74AC08SJ	IC	1	
D1, D2	MA157	DIODE	2		IC241	MC74HC244AF	IC	1	
D3, D4	MA8075-H	DIODE	2		IC260, 61	Y7C18525SC	IC	2	
D30, 31	MA8030	DIODE	2		IC262	IDT71321A55	IC	1	
D32	MA8047-H	DIODE	1		IC263, 64	SN74S1051NS	IC	2	
D33-36	MA152K	DIODE	4		IC265	MC74HC175F	IC	1	
D80-83	MA157	DIODE	4		IC266	MC74HC164AF	IC	1	
D120-23	MA157	DIODE	4		IC267	MC74HC273AF	IC	1	
D160-63	MA157	DIODE	4		IC268	MC74HC74AF	IC	1	
D200, 01	MA152K	DIODE	2		IC269	MC74HC86AF	IC	1	
D202	MA8047-H	DIODE	1		IC280	MC74HC244AF	IC	1	
D203	MA152K	DIODE	1		IC281	MC74HC151F	IC	1	
D204, 05	MA8047-H	DIODE	2		IC282	SLA909SF1G	IC	1	
D206-09	MA152K	DIODE	4		IC300	TE7751	IC	1	
D300-02	LN1251CAL	DIODE	3		IC301, 02	MC74HC244AF	IC	2	
D320, 21	MA157	DIODE	2		IC303	T74VHCT244F	IC	1	
D340	MA728	DIODE	1		IC304, 05	MC74HC244AF	IC	2	
D341	MA736	DIODE	1		IC320	SC371025AVFU	IC	1	
D342	MA728	DIODE	1		IC321	MC14053BF	IC	1	
D343	MA736	DIODE	1		IC322	MC74HC574AF	IC	1	
D344	MA8039-L	DIODE	1		IC323	TC7WU04F	IC	1	
D380	MA728	DIODE	1		IC324	T74VHC04F	IC	1	
D381	MA736	DIODE	1		IC325	74AC74SJ	IC	1	
D382	MA728	DIODE	1		IC326	MC74HC74AF	IC	1	
D383	MA736	DIODE	1		IC340	TL1451CNS	IC	1	
D400-05	MA738	DIODE	6		IC341	UPC393G2	IC	1	
D406, 07	MA8047-H	DIODE	2		IC342	NJM4580ED	IC	1	
D408-13	MA738	DIODE	6		IC400, 01	AN3890FBS	IC	2	
D450	MA152K	DIODE	1		IC402	NJM4580ED	IC	1	
D451-56	MA738	DIODE	6		IC403	NJM2903M	IC	1	
D457	MA152K	DIODE	1		IC404	NJM4580ED	IC	1	
D458-63	MA738	DIODE	6		IC450, 51	AN3834K	IC	2	
D510-13	MA701A	DIODE	4		IC452	UPC4558G2	IC	1	
D514-19	MA704A	DIODE	6		IC510, 11	NJM79L09UA	IC	2	
					IC512, 13	NJM79L09UA	IC	2	
FL320, 21	VLF1016A470	FILTER	2		IC514	XC62AP5002P	IC	1	
FL510-15	VLF1016A470	FILTER	6		IC515, 16	XC62AP3002P	IC	2	
					IC517	NJM79L05UA	IC	1	
IC1	TC7WU04F	IC	1		IC600	NJM2903M	IC	1	
IC2	UPC4082G2	IC	1						
IC3	TC4052BF	IC	1		IS235	VJS3096640	CONNECTOR (FEMALE)	1	
IC30	UPC4082G2	IC	1						
IC31	NJM4580ED	IC	1		L230, 31	VL00576	COIL	2	
IC32	AD633JR	IC	1		L340	VL00504331K	COIL 330UH	1	
IC33	UPC4082G2	IC	1		L341	VL00407120M	COIL 12UH	1	
IC34	MC74HC74AF	IC	1		L342	VL00504331K	COIL 330UH	1	
IC35	TC7WU04F	IC	1		L380	VL00407120M	COIL 12UH	1	
IC60, 61	MC74HC08AF	IC	2		L381, 82	VL00504331K	COIL 330UH	2	
IC63-66	MC74HC74AF	IC	4		L510	VLP0133	COIL	1	
IC67	MC74HC157AF	IC	1						
IC68	T74HC191AF	IC	1		P1, P2	VJP3454B096	CONNECTOR (MALE)	2	
IC69	MC74HC32AF	IC	1						
IC70	MC74HC86AF	IC	1		Q1	2SD601A-R	TRANSISTOR	1	
IC71	MC74HC04AF	IC	1		Q2, Q3	2SB709A-R	TRANSISTOR	2	
IC72	MC74HC74AF	IC	1		Q4	2SD601A-R	TRANSISTOR	1	
IC73	MC74HC11F	IC	1		Q5	2SB709A-R	TRANSISTOR	1	
IC74	MC74HC27F	IC	1		Q6	2SD601A-R	TRANSISTOR	1	
IC80, 81	UPC4741G2	IC	2		Q340, 41	2SB1174-Q	TRANSISTOR	2	
IC82	NJM2901M	IC	1		Q380, 81	2SB1174-Q	TRANSISTOR	2	
IC83	MC74HC4050F	IC	1		Q400	PU3210	TRANSISTOR	1	
IC120, 21	UPC4741G2	IC	2		Q401	PU3110	TRANSISTOR	1	
IC160	NJM2901M	IC	1		Q402	PU3210	TRANSISTOR	1	
IC161, 62	UPC4741G2	IC	2		Q403	PU3110	TRANSISTOR	1	
IC200	ADG408BR	IC	1		Q510, 11	2SD601A-R	TRANSISTOR	2	
IC201	AD7896AR	IC	1						
IC202	AD7943BR	IC	1		QR1	UN2213	TRANSISTOR-RESISTOR	1	
IC203	SMP08FS	IC	1		QR2	UN2113	TRANSISTOR-RESISTOR	1	
IC204	MC74HC244AF	IC	1		QR3	UN2215	TRANSISTOR-RESISTOR	1	
IC205	UPC4082G2	IC	1		QR4	UN2115	TRANSISTOR-RESISTOR	1	
IC207	UPC4082G2	IC	1		QR5, R6	UN2213	TRANSISTOR-RESISTOR	2	
IC230	MC68332ACFC2	IC	1		QR7, R8	UN2113	TRANSISTOR-RESISTOR	2	
IC231	TL7705CP5B	IC	1		QR30	UN2213	TRANSISTOR-RESISTOR	1	
IC235	VSI3060	IC	1		QR81, 82	UN2213	TRANSISTOR-RESISTOR	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
QR83	UN2113	TRANSISTOR-RESISTOR	1		R102, 03	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	2	
QR84	UN2213	TRANSISTOR-RESISTOR	1		R104	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR85	UN2113	TRANSISTOR-RESISTOR	1		R105	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
QR120	UN2213	TRANSISTOR-RESISTOR	1		R106	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR121	UN2113	TRANSISTOR-RESISTOR	1		R107	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
QR122	UN2213	TRANSISTOR-RESISTOR	1		R108	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
QR123	UN2113	TRANSISTOR-RESISTOR	1		R109	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR124	UN2213	TRANSISTOR-RESISTOR	1		R120, 21	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
QR160	UN2213	TRANSISTOR-RESISTOR	1		R122, 23	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2	
QR161	UN2113	TRANSISTOR-RESISTOR	1		R124	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR162	UN2213	TRANSISTOR-RESISTOR	1		R125	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
QR163	UN2113	TRANSISTOR-RESISTOR	1		R126	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR164	UN2213	TRANSISTOR-RESISTOR	1		R127	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
QR340, 41	UN2111	TRANSISTOR-RESISTOR	2		R128, 29	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
QR400	UN2213	TRANSISTOR-RESISTOR	1		R130, 31	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2	
QR401	UN2113	TRANSISTOR-RESISTOR	1		R132, 33	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2	
QR600	UN2217	TRANSISTOR-RESISTOR	1		R134	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR601	UN2211	TRANSISTOR-RESISTOR	1		R135	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R1-R3	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	3		R136	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1		R137	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R5	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R138	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R6	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1		R139, 40	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R7	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R141, 42	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R8	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R143, 44	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2	
R9, 10	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		R145	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R11	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R146	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R12, 13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R147	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R14	ERJ6GEYG274	M.RESISTOR CH 1/10W 270K	1		R148	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R15	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1		R149	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R16	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		R160, 61	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R17	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		R162, 63	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2	
R18	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1		R164	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R19, 20	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R165	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
R21	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R166	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R25-29	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	5		R167	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
R31	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R168, 69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R32	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R170, 71	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2	
R33	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		R172	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R34	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1		R173	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R35	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R174	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R36	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1		R175	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R37	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1		R176	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R38, 39	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	2		R177, 78	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2	
R40	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R179, 80	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R41	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R181, 82	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R42	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R183, 84	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2	
R43-45	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R46	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R186	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R48	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R187	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R49	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R188	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R50	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1		R189	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R51	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1		R200	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R52	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1		R201, 02	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R53	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1		R203	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R54	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R204	ERJ6RBD303	M.RESISTOR CH 1/10W 30K	1	
R55	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R205	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R56-59	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4		R206	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R60	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R207	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R61-77	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	17		R208	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R80, 81	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R209	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R82, 83	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2		R210	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R84	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R211	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R85	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R212, 13	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R86	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R214	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R87, 88	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R215, 16	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	2	
R89, 90	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	2		R217, 18	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R91, 92	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2		R219	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R93	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R220-22	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3	
R94	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R223	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R95	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R232	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R96	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R234	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R97	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R235-43	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	9	
R98, 99	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R244	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R100, 01	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
					R246	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R247	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R384	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R248-51	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4		R385	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R252	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R400, 01	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R253	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R402	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	
R254	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R403	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R256	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R404, 05	ERJ12YJR68	M.RESISTOR CH 1/2W 0.68	2	
R257	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R406, 07	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	2	
R259, 60	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R408	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R261	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R409	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R262	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R410	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R263, 64	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R411	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R265	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R412	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R266	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R413	ERJ6GEYG273	M.RESISTOR CH 1/10W 2.7K	1	
R267-69	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3		R414, 15	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R270, 71	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R416	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R275-78	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	4		R417	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R280	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R418	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R281, 82	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2		R419	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R283-85	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3		R420	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R286, 87	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R421	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R300	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R422	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R301	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R423	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R303, 04	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R424, 25	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R305-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	9		R426	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	
R314-16	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	3		R427	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R317-19	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3		R428, 29	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R430, 31	ERJ12YJR68	M.RESISTOR CH 1/2W 0.68	2	
R321	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R432, 33	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R322-24	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	3		R436, 37	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R325	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R450	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R326	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R451	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
R327-29	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	3		R452	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R330	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R453-55	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	3	
R331	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R456, 57	ERJ12YJ2R2	M.RESISTOR CH 1/2W 2.2	2	
R332	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R458	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
R333	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R459	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R334	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R460	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R336, 37	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R461	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R338, 39	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R462	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
R340	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R463	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R341	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R464, 65	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R342	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		R466, 67	ERJ12YJ2R2	M.RESISTOR CH 1/2W 2.2	2	
R343	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R468	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
R344	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R469	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R345	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1		R470	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R346	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R471	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R347	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R510	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R511, 12	ERJ6RBD391	M.RESISTOR CH 1/10W 390	2	
R349	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R513	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R350	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R514-17	ERJ6RBD391	M.RESISTOR CH 1/10W 390	4	
R351-53	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R550-59	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	10	
R354	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R600-02	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	3	
R355	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R603-06	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	4	
R356	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R607-15	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	9	
R357	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R621	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R358	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1		R622-27	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	6	
R359	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R628	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R360	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R629, 30	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R361	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R631, 32	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R362, 63	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		R640	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R364	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R650, 51	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	2	
R365	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R652	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R366	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		R653	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R367	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R654	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R368	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R655	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R369	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R656	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R370	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1						
R371	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		TG510, 11	VJR0646	TEST POINT	2	
R372	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1						
R373	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		TP1	VJR0646	TEST POINT	1	
R374, 75	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		TP2	EYF6CU	TEST POINT	1	
R380	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		TP30, 31	VJR0646	TEST POINT	2	
R381	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1		TP32, 33	EYF6CU	TEST POINT	2	
R382	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		TP34, 35	VJR0646	TEST POINT	2	
R383	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		TP60	VJR0646	TEST POINT	1	

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Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP80-83	VJR0646	TEST POINT	4		C175	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
TP120-23	VJR0646	TEST POINT	4		C200	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	1	
TP160-63	VJR0646	TEST POINT	4		C202, 03	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
TP200	EYF6CU	TEST POINT	1		C204	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
TP201	VJR0646	TEST POINT	1		C205-07	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
TP202	EYF6CU	TEST POINT	1		C208-10	ECUM1H472KBN	C.CAPACITOR CH 50V 4700P	3	
TP230-34	VJR0646	TEST POINT	5		C211	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
TP280	VJR0646	TEST POINT	1		C212, 13	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
TP300-02	VJR0646	TEST POINT	3		C214	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
TP320, 21	VJR0646	TEST POINT	2		C215, 16	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2	
TP400, 01	VJR0646	TEST POINT	2		C218	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
TP450, 51	VJR0646	TEST POINT	2		C230-32	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	3	
					C233-36	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	4	
X320	VSX0645	CRYSTAL OSCILLATOR	1		C237	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
		MISCELLANEOUS			C238	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
					C239	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
	VML2143	CARD PULLER	1		C240-49	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	10	
	VML2144	CARD PULLER	1		C250, 51	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	2	
					C260, 61	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
					C263-70	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	8	
					C280-86	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	7	
					C300-02	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
					C303	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
■ E2	VEP82105G	F1 SERVO P.C. BOARD	1	(RTL) FOR AJ-D450E/D440E	C304-08	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
					C309	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C1, C2	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C320, 21	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C3	ECEVICV220Q	E.CAPACITOR CH 16V 22U	1		C322	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1		C323	ECEVICV100Q	E.CAPACITOR CH 16V 10U	1	
C5, C6	ECEVICV220Q	E.CAPACITOR CH 16V 22U	2		C324	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C7	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1		C325, 26	ECEVICV100Q	E.CAPACITOR CH 16V 10U	2	
C8, C9	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C327, 28	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C10	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C329	ECEVICV100Q	E.CAPACITOR CH 16V 10U	1	
C11, 12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C330	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C13	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1		C331-34	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	4	
C14	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C335, 36	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	2	
C15	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	1		C337	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C30-34	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5		C340	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C35	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	1		C341	ECATLXLV101	E.CAPACITOR 25V 100U	1	
C36-38	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3		C342, 43	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C39	ECEVICV100Q	E.CAPACITOR CH 16V 10U	1		C344	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C40, 41	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	2		C345	ECATLXLV101	E.CAPACITOR 25V 100U	1	
C42, 43	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C346-48	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C60, 61	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C349-53	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
C63-74	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	12		C354	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C80, 81	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C355	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C82	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C356	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C83	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1		C357	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C84	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C358	ECATLXLV101	E.CAPACITOR 25V 100U	1	
C85, 86	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C359	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C87	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C360	ECATLXLV101	E.CAPACITOR 25V 100U	1	
C88	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1		C361	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C89, 90	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C362	ECATLXLV101	E.CAPACITOR 25V 100U	1	
C91	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C380, 81	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C92, 93	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C382	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C94, 95	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C383	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C120, 21	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C384	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C123	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C385, 86	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C124, 25	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2		C387	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C126	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C388	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1	
C127, 28	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C389	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C129, 30	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C390	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C131, 32	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C391	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C133, 34	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C400	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C135	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C401-03	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C160, 61	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C404-06	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3	
C162	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C407	ECEVICV100Q	E.CAPACITOR CH 16V 10U	1	
C163, 64	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2		C408	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C165	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C409-11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
C166, 67	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C412	ECUM1E224ZFN	C.CAPACITOR CH 25V 0.22U	1	
C168, 69	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C413	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C170, 71	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		C414	ECUX1C105KBN	C.CAPACITOR CH 16V 1U	1	
C172	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C415	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
C173, 74	ECEVIEV330Q	E.CAPACITOR CH 25V 33U	2		C416-18	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
					C419	ECEVIEV47R7Q	E.CAPACITOR CH 50V 4.7U	1	
					C420	ECEVICV100Q	E.CAPACITOR CH 16V 10U	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C421	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D32	MA8047-H	DIODE	1	
C422	ECUM1H331JON	C. CAPACITOR CH 50V 330P	1		D33-36	MA152K	DIODE	4	
C423	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		D80-83	MA157	DIODE	4	
C424-27	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4		D120-23	MA157	DIODE	4	
C428, 29	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		D160-63	MA157	DIODE	4	
C430	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D200, 01	MA152K	DIODE	2	
C431	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		D202	MA8047-H	DIODE	1	
C432-34	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3		D203	MA152K	DIODE	1	
C450	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1		D204, 05	MA8047-H	DIODE	2	
C451, 52	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D206-09	MA152K	DIODE	4	
C453, 54	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	2		D300-02	LN1251CAL	DIODE	3	
C455	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		D320, 21	MA157	DIODE	2	
C456	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		D340	MA728	DIODE	1	
C457	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		D341	MA736	DIODE	1	
C458, 59	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	2		D342	MA728	DIODE	1	
C460	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		D343	MA736	DIODE	1	
C461	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1		D344	MA8039-L	DIODE	1	
C462	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		D380	MA728	DIODE	1	
C463	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		D381	MA736	DIODE	1	
C464	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		D382	MA728	DIODE	1	
C465	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		D383	MA736	DIODE	1	
C466	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		D400-05	MA738	DIODE	6	
C467	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		D406, 07	MA8047-H	DIODE	2	
C468, 69	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		D408-13	MA738	DIODE	6	
C470	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D450	MA152K	DIODE	1	
C471	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		D451-56	MA738	DIODE	6	
C472	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	1		D457	MA152K	DIODE	1	
C473	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1		D458-63	MA738	DIODE	6	
C474, 75	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	2		D510-13	MA701A	DIODE	4	
C476	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		D514-19	MA704A	DIODE	6	
C477, 78	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	2						
C479	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		FL320, 21	VLF1016A470	FILTER	2	
C480	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		FL510-15	VLF1016A470	FILTER	6	
C481	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1						
C482	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1		IC1	TC7WU04F	IC	1	
C483	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		IC2	UPC4082G2	IC	1	
C484	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		IC3	TC4052BF	IC	1	
C485	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		IC30	UPC4082G2	IC	1	
C486	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		IC31	NJM4580ED	IC	1	
C487	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1		IC32	AD633JR	IC	1	
C488	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		IC33	UPC4082G2	IC	1	
C489, 90	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		IC34	MC74HC74AF	IC	1	
C491	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC35	TC7W00F	IC	1	
C492	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		IC60, 61	MC74HC08AF	IC	2	
C493	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	1		IC63-66	MC74HC74AF	IC	4	
C510	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC67	MC74HC157AF	IC	1	
C511	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC68	T74HC191AF	IC	1	
C512, 13	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC69	MC74HC32AF	IC	1	
C514	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC70	MC74HC86AF	IC	1	
C515	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC71	MC74HC04AF	IC	1	
C516	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC72	MC74HC74AF	IC	1	
C517-19	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		IC73	MC74HC11F	IC	1	
C520	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC74	MC74HC27F	IC	1	
C521	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC80, 81	UPC4741G2	IC	2	
C522, 23	ECEV1HV0100	E. CAPACITOR CH 50V 1U	2		IC82	NJM2901M	IC	1	
C524	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC83	MC74HC4050F	IC	1	
C525	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC120, 21	UPC4741G2	IC	2	
C526	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC160	NJM2901M	IC	1	
C527, 28	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC161, 62	UPC4741G2	IC	2	
C529	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC200	ADG408BR	IC	1	
C530-32	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		IC201	AD7896AR	IC	1	
C533	ECEV1AV3300	E. CAPACITOR CH 10V 33U	1		IC202	AD7943BR	IC	1	
C534	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC203	SMP08FS	IC	1	
C535	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC204	MC74HC244AF	IC	1	
C536	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC205	UPC4082G2	IC	1	
C537	ECEV1HV0100	E. CAPACITOR CH 50V 1U	1		IC207	UPC4082G2	IC	1	
C538	ECEV1EV3300	E. CAPACITOR CH 25V 33U	1		IC230	MC68332ACFC2	IC	1	
C539	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC231	TL7705CPSB	IC	1	
C600, 01	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC235	VS13061	IC	1	
C602	ECCF1H330JC	C. CAPACITOR 50V 33P	1		IC236, 37	74AC74SJ	IC	2	
C603	ECCF1H220JC	C. CAPACITOR 50V 22P	1		IC238, 39	TC7WU04F	IC	2	
					IC240	74AC08SJ	IC	1	
D1, D2	MA157	DIODE	2		IC241	MC74HC244AF	IC	1	
D3, D4	MA8075-H	DIODE	2		IC260, 61	Y7C18525SC	IC	2	
D30, 31	MA8030	DIODE	2		IC262	IDT71321A55	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC263, 64	SN74S1051NS	IC	2		QR123	UN2113	TRANSISTOR-RESISTOR	1	
IC265	MC74HC175F	IC	1		QR124	UN2213	TRANSISTOR-RESISTOR	1	
IC266	MC74HC164AF	IC	1		QR160	UN2213	TRANSISTOR-RESISTOR	1	
IC267	MC74HC273AF	IC	1		QR161	UN2113	TRANSISTOR-RESISTOR	1	
IC268	MC74HC74AF	IC	1		QR162	UN2213	TRANSISTOR-RESISTOR	1	
IC269	MC74HC86AF	IC	1		QR163	UN2113	TRANSISTOR-RESISTOR	1	
IC280	MC74HCT244AF	IC	1		QR164	UN2213	TRANSISTOR-RESISTOR	1	
IC281	MC74HC151F	IC	1		QR340, 41	UN2111	TRANSISTOR-RESISTOR	2	
IC282	SLA9095F1G	IC	1		QR400	UN2213	TRANSISTOR-RESISTOR	1	
IC300	TE7751	IC	1		QR401	UN2113	TRANSISTOR-RESISTOR	1	
IC301, 02	MC74HC244AF	IC	2		QR600	UN2217	TRANSISTOR-RESISTOR	1	
IC303	T74VHCT244F	IC	1		QR601	UN2211	TRANSISTOR-RESISTOR	1	
IC304, 05	MC74HC244AF	IC	2						
IC320	SC371025AVFU	IC	1		R1-R3	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	3	
IC321	MC14053BF	IC	1		R4	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
IC322	MC74HC574AF	IC	1		R5	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
IC323	TC7WU04F	IC	1		R6	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
IC324	T74VHCU04F	IC	1		R7	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
IC325	74AC74SJ	IC	1		R8	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
IC326	MC74HC74AF	IC	1		R9, 10	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2	
IC340	TL1451CNS	IC	1		R11	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
IC341	UPC393G2	IC	1		R12, 13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC342	NJM4580ED	IC	1		R14	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
IC400, 01	AM3890FBS	IC	2		R15	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
IC402	NJM4580ED	IC	1		R16	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
IC403	NJM2903M	IC	1		R17	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
IC404	NJM4580ED	IC	1		R18	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
IC450, 51	AM3834K	IC	2		R19, 20	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC452	UPC4558G2	IC	1		R21	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
IC510, 11	NJM78L09UA	IC	2		R25-29	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	5	
IC512, 13	NJM79L09UA	IC	2		R31	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
IC514	XC62AP5002P	IC	1		R32	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC515, 16	XC62AP3002P	IC	2		R33	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
IC517	NJM79L05UA	IC	1		R34	ERJ6RBD563	M.RESISTOR CH 1/10W 56K	1	
IC600	NJM2903M	IC	1		R35	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
					R36	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1	
IS235	VJS3096640	CONNECTOR (FEMALE)	1		R37	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1	
					R38, 39	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	2	
L230, 31	VL00576	COIL	2		R40	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
L340	VL00504331K	COIL 330UH	1		R41	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
L341	VL00407120M	COIL 12UH	1		R42	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
L342	VL00504331K	COIL 330UH	1		R43-45	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
L380	VL00407120M	COIL 12UH	1		R46	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
L381, 82	VL00504331K	COIL 330UH	2		R48	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L510	VLP0133	COIL	1		R49	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
					R50	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R51	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1	
					R52	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
Q1	2SD601A-R	TRANSISTOR	1		R53	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1	
Q2, Q3	2SB709A-R	TRANSISTOR	2		R54	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
Q4	2SD601A-R	TRANSISTOR	1		R55	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
Q5	2SB709A-R	TRANSISTOR	1		R56-59	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
Q6	2SD601A-R	TRANSISTOR	1		R60	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q340, 41	2SB1174-0	TRANSISTOR	2		R61-77	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	17	
Q380, 81	2SB1174-0	TRANSISTOR	2		R80, 81	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
Q400	PU3210	TRANSISTOR	1		R82, 83	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2	
Q401	PU3110	TRANSISTOR	1		R84	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
Q402	PU3210	TRANSISTOR	1		R85	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q403	PU3110	TRANSISTOR	1		R86	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
Q510, 11	2SD601A-R	TRANSISTOR	2		R87, 88	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
					R89, 90	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	2	
QR1	UN2213	TRANSISTOR-RESISTOR	1		R91, 92	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2	
QR2	UN2113	TRANSISTOR-RESISTOR	1		R93	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR3	UN2215	TRANSISTOR-RESISTOR	1		R94	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
QR4	UN2115	TRANSISTOR-RESISTOR	1		R95	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR5, R6	UN2213	TRANSISTOR-RESISTOR	2		R96	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
QR7, R8	UN2113	TRANSISTOR-RESISTOR	2		R97	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
QR30	UN2213	TRANSISTOR-RESISTOR	1		R98, 99	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
QR81, 82	UN2213	TRANSISTOR-RESISTOR	2		R100, 01	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
QR83	UN2113	TRANSISTOR-RESISTOR	1		R102, 03	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	2	
QR84	UN2213	TRANSISTOR-RESISTOR	1		R104	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR85	UN2113	TRANSISTOR-RESISTOR	1		R105	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
QR120	UN2213	TRANSISTOR-RESISTOR	1		R106	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR121	UN2113	TRANSISTOR-RESISTOR	1		R107	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
QR122	UN2213	TRANSISTOR-RESISTOR	1		R108	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R109	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R257	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R120, 21	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R259, 60	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R122, 23	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2		R261	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R124	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R262	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R125	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R263, 64	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R126	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R265	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R127	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R266	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R128, 29	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R267-69	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3	
R130, 31	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2		R270, 71	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R132, 33	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2		R275-78	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R134	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R280	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R135	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R281, 82	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R136	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R283-85	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3	
R137	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R286, 87	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R138	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R300	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R139, 40	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R301	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R141, 42	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R303, 04	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R143, 44	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2		R305-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	9	
R145	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R314-16	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	3	
R146	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R317-19	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3	
R147	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R148	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R321	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R149	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R322-24	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	3	
R160, 61	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R325	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R162, 63	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	2		R326	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R164	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R327-29	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	3	
R165	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R330	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R166	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R331	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R167	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1		R332	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R168, 69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R333	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R170, 71	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2		R334	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R172	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R336, 37	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R173	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R338, 39	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R174	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R340	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R175	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R341	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R176	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R342	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R177, 78	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	2		R343	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
R179, 80	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R344	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R181, 82	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R345	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R183, 84	ERJ6RED224	M.RESISTOR CH 1/10W 220K	2		R346	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R347	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R186	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R187	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R349	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R188	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R350	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R189	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R351-53	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R200	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R354	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R201, 02	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R355	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R203	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R356	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R204	ERJ6RBD303	M.RESISTOR CH 1/10W 30K	1		R357	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R205	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R358	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R206	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R359	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R207	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R360	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R208	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R361	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R209	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R362, 63	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2	
R210	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R364	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R211	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R365	ERJ6GEYG474	M.RESISTOR CH 1/10W 470K	1	
R212, 13	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R366	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R214	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R367	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R215, 16	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	2		R368	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R217, 18	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		R369	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R219	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R370	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R220-22	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3		R371	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R223	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R372	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R232	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R373	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R234	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R374, 75	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R235-43	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	9		R380	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R244	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R381	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R382	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R246	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R383	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R247	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R384	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R248-51	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4		R385	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R252	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R400, 01	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R253	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R402	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	
R254	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R403	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R256	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R404, 05	ERJ12YJR68	M.RESISTOR CH 1/2W 0.68	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R406, 07	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	2	
R408	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R409	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1	
R410	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R411	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R412	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R413	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R414, 15	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
R416	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R417	ERJ6GEYG224	M. RESISTOR CH 1/10W 220K	1	
R418	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R419	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R420	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R421	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R422	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R423	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R424, 25	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
R426	ERJ6RBD333	M. RESISTOR CH 1/10W 33K	1	
R427	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	1	
R428, 29	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	2	
R430, 31	ERJ12YJR68	M. RESISTOR CH 1/2W 0.68	2	
R432, 33	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
R436, 37	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R450	ERJ6RBD472	M. RESISTOR CH 1/10W 4.7K	1	
R451	ERJ6RBD122	M. RESISTOR CH 1/10W 1.2K	1	
R452	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R453-55	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	3	
R456, 57	ERJ12YJ2R2	M. RESISTOR CH 1/2W 2.2	2	
R458	ERJ6GEYF393	M. RESISTOR CH 1/10W 39K	1	
R459	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R460	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R461	ERJ6RBD472	M. RESISTOR CH 1/10W 4.7K	1	
R462	ERJ6RBD122	M. RESISTOR CH 1/10W 1.2K	1	
R463	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R464, 65	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R466, 67	ERJ12YJ2R2	M. RESISTOR CH 1/2W 2.2	2	
R468	ERJ6GEYF393	M. RESISTOR CH 1/10W 39K	1	
R469	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R470	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R471	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R510	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R511, 12	ERJ6RBD391	M. RESISTOR CH 1/10W 390	2	
R513	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R514-17	ERJ6RBD391	M. RESISTOR CH 1/10W 390	4	
R550-59	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	10	
R600-02	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	3	
R603-06	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	4	
R607-15	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	9	
R621	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R622-27	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	6	
R628	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R629, 30	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R631, 32	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R640	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R650, 51	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	2	
R652	ERJ6RBD682	M. RESISTOR CH 1/10W 6.8K	1	
R653	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	1	
R654	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R655	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R656	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
TP510, 11	VJR0646	TEST POINT	2	
TP1	VJR0646	TEST POINT	1	
TP2	EYF6CU	TEST POINT	1	
TP30, 31	VJR0646	TEST POINT	2	
TP32, 33	EYF6CU	TEST POINT	2	
TP34, 35	VJR0646	TEST POINT	2	
TP60	VJR0646	TEST POINT	1	
TP80-83	VJR0646	TEST POINT	4	
TP120-23	VJR0646	TEST POINT	4	
TP160-63	VJR0646	TEST POINT	4	
TP200	EYF6CU	TEST POINT	1	
TP201	VJR0646	TEST POINT	1	
TP202	EYF6CU	TEST POINT	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP230-34	VJR0646	TEST POINT	5	
TP280	VJR0646	TEST POINT	1	
TP300-02	VJR0646	TEST POINT	3	
TP320, 21	VJR0646	TEST POINT	2	
TP400, 01	VJR0646	TEST POINT	2	
TP450, 51	VJR0646	TEST POINT	2	
X320	VSX0645	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	

AJ-D450/440PE

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C549, 50	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		D701-06	MA715	DIODE	6	
C703-13	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	11		D709	MA715	DIODE	1	
C714	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		D711-14	MA157	DIODE	4	
C715, 16	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2		D715	MA152WK	DIODE	1	
C717-21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5		D716-19	MA715	DIODE	4	
C722, 23	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2		D720-22	SN74S1051NS	IC	3	
C724, 25	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		D723, 24	MA715	DIODE	2	
C726	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1						
C727	ECUM1H050CCN	C.CAPACITOR CH 50V 5P	1		FL701, 02	VLF1016A470	FILTER	2	
C728	ECEV0JV4700	E.CAPACITOR CH6.3V 47U	1		FL900-03	VLF1016A470	FILTER	4	
C729	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1						
C730	ECUV1H682KBN	C.CAPACITOR CH 50V 6800P	1		IC1	M37702S4AFP	IC	1	
C731	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		IC2	VS13066	IC	1	
C732	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC3	74F573SJ	IC	1	
C733, 34	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	2		IC4	74F138SJ	IC	1	
C735	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC5	74F573SJ	IC	1	
C736	ECA1CAXN330	E.CAPACITOR 16V 33U	1		IC6	TL7705CPSB	IC	1	
C737	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC7	MC74HC132AF	IC	1	
C738	ECA1CAXN330	E.CAPACITOR 16V 33U	1		IC8	MC74HC04AF	IC	1	
C739, 40	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		IC9, 10	74AC32SJ	IC	2	
C741	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	1		IC11, 12	74F32SJ	IC	2	
C742	ECUV1H120JCN	C.CAPACITOR CH 50V 12P	1		IC13	MC74HC74AF	IC	1	
C743	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		IC14	74F11SJ	IC	1	
C744, 45	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	2		IC15	1DT71321A55	IC	1	
C746	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC16	74F245SJ	IC	1	
C747-61	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	15		IC17	DS1230Y100	IC	1	
C762	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC19, 20	74F541SJ	IC	2	
C763	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC23	74F245SJ	IC	1	
C764	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC24	UPD6456T611Y	IC	1	
C765	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC25	74F138SJ	IC	1	
C766	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC26	MB89363BHPF	IC	1	
C767	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC27, 28	M54649L	IC	2	
C768	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC29	NJM2901M	IC	1	
C769	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC30	NJM2904M	IC	1	
C770	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		IC31, 32	MC14538BF	IC	2	
C771	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1		IC33	74F32SJ	IC	1	
C772, 73	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		IC34	74F00SJ	IC	1	
C774	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	1		IC35	NJM2901M	IC	1	
C775	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC36, 37	TC7S14F	IC	2	
C776	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC500	HD64180ZRP8	IC	1	
C777-80	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4		IC501, 02	MC74HC541AF	IC	2	
C781, 82	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		IC503	VS13062	IC	1	
C783	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC504	K6256DLG7L	IC	1	
C784	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC505	1DT71321A55	IC	1	
C785	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC506	MC74HC138AF	IC	1	
C900, 01	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2		IC507	74F32SJ	IC	1	
C902, 03	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		IC508	MC74HC00AF	IC	1	
C904-07	ECEV1CV4700	E.CAPACITOR CH 16V 47U	4		IC509	T74HC191AF	IC	1	
					IC510	Z84C4310FEC	IC	1	
D1	MA157	DIODE	1		IC514	MC34051M	IC	1	
D2-D5	MA715	DIODE	4		IC515	MC1488M	IC	1	
D8	MA152WK	DIODE	1		IC516	MC1489AM	IC	1	
D9	MA3068-H	DIODE	1		IC517	MC14024BF	IC	1	
D10	MA3051-H	DIODE	1		IC523	MC74HC04AF	IC	1	
D11	MA3047-M	DIODE	1		IC524	MC14050BF	IC	1	
D12	MA3100-M	DIODE	1		IC525	SN74LS38NS	IC	1	
D13	MA3051-H	DIODE	1		IC527	MB89363BHPF	IC	1	
D14	MA3075-M	DIODE	1		IC528, 29	MC14021BF	IC	2	
D15	21DQ04	DIODE	1		IC530, 31	T74HC191AF	IC	2	
D16	MA3051-H	DIODE	1		IC532	MC74HC574AF	IC	1	
D17	MA157	DIODE	1		IC701	M37702S4AFP	IC	1	
D18-22	MA152WK	DIODE	5		IC702	VS13070	IC	1	
D25-27	MA152WK	DIODE	3		IC703	K6256DLG7L	IC	1	
D28-43	MA738	DIODE	16		IC704	74F573SJ	IC	1	
D44	MA152WK	DIODE	1		IC705, 06	74F138SJ	IC	2	
D45-48	MA738	DIODE	4		IC707, 08	74F32SJ	IC	2	
D49, 50	SN74S1051NS	IC	2		IC709	74F00SJ	IC	1	
D51	MA3062-L	DIODE	1		IC710	MN51040VP1	IC	1	
D52	MA3082M	DIODE	1		IC711	MC74HC574AF	IC	1	
D53	MA3075-M	DIODE	1		IC712	74AC32SJ	IC	1	
D54	MA738	DIODE	1		IC713	74F32SJ	IC	1	
D500	MA152WK	DIODE	1		IC714, 15	74F541SJ	IC	2	
D504, 05	MA715	DIODE	2		IC716	74F245SJ	IC	1	
D506	MA152WK	DIODE	1		IC717	74F541SJ	IC	1	
D507	MA715	DIODE	1		IC718	MC14053BF	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC719	NJM4560MD	IC	1		R16	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
IC720	NJM2068MD	IC	1		R17	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
IC721	UPC319G2	IC	1		R18, 19	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
IC722	UPC4741G2	IC	1		R20	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IC723	NJM78L09UA	IC	1		R21, 22	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
IC724	NJM79L09UA	IC	1		R23, 24	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
IC725, 26	NJM084M	IC	2		R25, 26	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
IS2	VJS2336A032	CONNECTOR (FEMALE)	1		R27, 28	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
IS17	VJS3096628	CONNECTOR (FEMALE)	1		R29	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IS503	VJS2336A032	CONNECTOR (FEMALE)	1		R33-35	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
IS702	VJS2336A032	CONNECTOR (FEMALE)	1		R38, 39	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
L1	VL00163J270	COIL 27UH	1		R43	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
L2	VL00319K470	COIL 47UH	1		R44	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
L500-03	VL00576	COIL	4		R45	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
L701	VL00163J470	COIL 47UH	1		R46	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
L900-03	VLP0133	COIL	4		R47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
LED1-D4	LN1251CAL	DIODE	4		R48	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R49	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
Q3	2SB710A-R	TRANSISTOR	1		R54, 55	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q4	2SB936A-Q	TRANSISTOR	1		R56	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q5, Q6	2SD601A-R	TRANSISTOR	2		R57	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
Q7, Q8	2SB1073-R	TRANSISTOR	2		R58-61	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	4	
Q9	2SD601A-R	TRANSISTOR	1		R62	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q10	2SB709A-R	TRANSISTOR	1		R63-70	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	8	
Q11, 12	2SD1119-R	TRANSISTOR	2		R71, 72	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q13	2SB709A-R	TRANSISTOR	1		R73, 74	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
Q14	2SD601A-R	TRANSISTOR	1		R75	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
Q15, 16	2SB1073-R	TRANSISTOR	2		R76, 77	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
Q17	2SD601A-R	TRANSISTOR	1		R82	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
Q18	2SB709A-R	TRANSISTOR	1		R83	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q19, 20	2SD1119-R	TRANSISTOR	2		R84-88	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	5	
Q21	2SB709A-R	TRANSISTOR	1		R90-95	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	6	
Q22	2SD601A-R	TRANSISTOR	1		R96	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q23, 24	2SB1175-Q	TRANSISTOR	2		R97	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q25	2SD601A-R	TRANSISTOR	1		R100	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q26	2SB709A-R	TRANSISTOR	1		R101, 02	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q27, 28	2SD1747P0Y	TRANSISTOR	2		R103, 04	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
Q29	2SB709A-R	TRANSISTOR	1		R105	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q30	2SD601A-R	TRANSISTOR	1		R106	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q31, 32	2SB1073-R	TRANSISTOR	2		R108	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q33	2SD601A-R	TRANSISTOR	1		R109, 10	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q34	2SB709A-R	TRANSISTOR	1		R111, 12	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
Q35, 36	2SD1119-R	TRANSISTOR	2		R113	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q37	2SB709A-R	TRANSISTOR	1		R114	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q38	2SD601A-R	TRANSISTOR	1		R116	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q39	2SB1175-Q	TRANSISTOR	1		R117, 18	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q701-03	2SD601A-R	TRANSISTOR	3		R119, 20	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
Q704, 05	2SB709A-R	TRANSISTOR	2		R121	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
QR3-10	UN2213	TRANSISTOR-RESISTOR	8		R122	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
QR11-16	UN2214	TRANSISTOR-RESISTOR	6		R124	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
QR17	UN2213	TRANSISTOR-RESISTOR	1		R125, 26	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
QR18-26	UN2214	TRANSISTOR-RESISTOR	9		R127, 28	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
QR27, 28	UN2113	TRANSISTOR-RESISTOR	2		R129-37	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	9	
QR29, 30	UN2214	TRANSISTOR-RESISTOR	2		R138, 39	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
QR31, 32	UN2113	TRANSISTOR-RESISTOR	2		R141, 42	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
QR33, 34	UN2214	TRANSISTOR-RESISTOR	2		R144	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
QR35, 36	UN2113	TRANSISTOR-RESISTOR	2		R145-47	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	3	
QR37, 38	UN2213	TRANSISTOR-RESISTOR	2		R148	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
QR39, 40	UN2113	TRANSISTOR-RESISTOR	2		R150	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
QR41	UN2213	TRANSISTOR-RESISTOR	1		R151	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
QR42	UN2113	TRANSISTOR-RESISTOR	1		R152	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
QR43	UN2213	TRANSISTOR-RESISTOR	1		R153	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
QR701-03	UN221L	TRANSISTOR-RESISTOR	3		R154	ERX1SJ1R0	M. RESISTOR 1W 1.0	1	
QR704, 05	UN2214	TRANSISTOR-RESISTOR	2		R155	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R1-R5	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	5		R156	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R6-10	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	5		R157	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R11, 12	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	2		R158	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R13, 14	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R159	ERG1SJ220	M. RESISTOR 1W 22	1	
					R160	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
					R161	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R162, 63	ERJ8GCYG151	M. RESISTOR CH 1/8W 150	2	
					R164, 65	ERJ6GEYG563	M. RESISTOR CH 1/10W 56K	2	
					R166	ERJ8GCYG152	M. RESISTOR CH 1/8W 1.5K	1	
					R167-69	ERJ8GCYG681	M. RESISTOR CH 1/8W 680	3	
					R170	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R171	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R298	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R172, 73	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2		R299	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R174-81	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		R304-15	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	12	
R182	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R316, 17	ERG1SJ100	M.RESISTOR 1W 10	2	
R184	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R318	ERX1SJ6R2	M.RESISTOR 1W 6.2	1	
R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R319	ERG1SJ100	M.RESISTOR 1W 10	1	
R186	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R187-90	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	4		R321-28	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
R191	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R329, 30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R192	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R332	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R193, 94	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R333	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R195	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R334	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R196, 97	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R335	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R198	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R336	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R199, 00	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R337, 38	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R201	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R341	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R202	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R342	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R203, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R205	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R346	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R206	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R347	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R207, 08	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R209	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R349-62	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	14	
R210, 11	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R363, 64	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	2	
R212	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R365	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R213, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R366	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R215	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R500	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R216, 17	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R501	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R218	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R502, 03	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R219, 20	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R504-11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R221	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R512	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R222	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R513, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R223, 24	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R517	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R225	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R518, 19	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R226	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R520	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R227, 28	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R529-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R229	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R532, 33	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R230, 31	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R534	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R232	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R233, 34	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R545	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R235	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R546	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R236, 37	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R548, 49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R238	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R550, 51	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R239, 40	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R554-58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5	
R241	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R580	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R242	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R585	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R243, 44	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R598	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R599	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R246	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R606, 07	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R247, 48	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R608	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R249	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R610-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R250, 51	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R618-20	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3	
R252	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R621-28	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R253, 54	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R630	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R255	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R633	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R256, 57	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R635	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R258	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R637	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R259, 60	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R640	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R261	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R641	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R262	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R701	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R263	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R702	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R266-69	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4		R705-10	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	6	
R271	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R711-16	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	6	
R273	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R717	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R275	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R718	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R277	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R719, 20	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R281	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R721, 22	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R284, 85	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R723-26	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	4	
R288	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R727	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R290	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R728-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	4	
R291	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R732-34	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	3	
R292, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R735	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R294	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R736	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R295	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R737	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R296	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R738	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R297	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R739, 40	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R741, 42	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	2	
R743, 44	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R745, 46	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R747	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R748	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R749, 50	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R751	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R752, 53	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R754	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R755	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R756-59	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	4	
R760	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R762	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R764, 65	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R766	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R767-69	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R770	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R771	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R772	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R773	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R774	ERJ6GEYG220	M. RESISTOR CH 1/10W 22	1	
R775, 76	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R777	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R778-81	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	4	
R782	ERJ6RED470	M. RESISTOR CH 1/10W 47	1	
R783	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R784	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R785	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R786	ERJ6RED820	M. RESISTOR CH 1/10W 82	1	
R787	ERJ6RED470	M. RESISTOR CH 1/10W 47	1	
R788	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R789	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R790	ERJ6RBD123	M. RESISTOR CH 1/10W 12K	1	
R791	ERJ6RBD683	M. RESISTOR CH 1/10W 68K	1	
R792	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R793	ERJ6RBD333	M. RESISTOR CH 1/10W 33K	1	
R794, 95	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
R796	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R797, 98	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2	
R799	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R800, 01	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R802	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R803, 04	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2	
R805-08	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	4	
R809	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R810	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R811, 12	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R813	ERJ6GEYG824	M. RESISTOR CH 1/10W 820K	1	
R814	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R815	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R816-39	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	24	
R840-47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R848-56	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	9	
R857	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R858, 59	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R860-62	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	3	
R863, 64	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2	
R865	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R866	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R867	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R868	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R869	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R870	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R871, 72	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R873	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R874, 75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R876	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R877, 78	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R879, 80	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R881	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R882, 83	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R884	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R885	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R886	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R887, 88	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	

[illegible]

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C500, 01	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	2		D18-22	MA152WK	DIODE	5	
C502	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D25-27	MA152WK	DIODE	3	
C503-06	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		D28-43	MA738	DIODE	16	
C508-13	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	6		D44	MA152WK	DIODE	1	
C514	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D45-48	MA738	DIODE	4	
C516-19	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		D49, 50	SN74S1051NS	IC	2	
C520	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D51	MA3062-L	DIODE	1	
C523	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1		D52	MA3082M	DIODE	1	
C526, 27	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2		D53	MA3075-M	DIODE	1	
C532-35	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4		D54	MA738	DIODE	1	
C537, 38	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		D500	MA152WK	DIODE	1	
C543-45	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		D504, 05	MA715	DIODE	2	
C547	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D506	MA152WK	DIODE	1	
C548	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D507	MA715	DIODE	1	
C549, 50	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D701-06	MA715	DIODE	6	
C703-13	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	11		D709	MA715	DIODE	1	
C714	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D711-14	MA157	DIODE	4	
C715, 16	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2		D715	MA152WK	DIODE	1	
C717-21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5		D716-19	MA715	DIODE	4	
C722, 23	ECUM1H1000CN	C. CAPACITOR CH 50V 10P	2		D720-22	SN74S1051NS	IC	3	
C724, 25	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		D723, 24	MA715	DIODE	2	
C726	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1						
C727	ECUM1H0500CN	C. CAPACITOR CH 50V 5P	1		FL701, 02	VLF1016A470	FILTER	2	
C728	ECEV0JV4700	E. CAPACITOR CH6.3V 47U	1		FL900-03	VLF1016A470	FILTER	4	
C729	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C730	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1		IC1	M37702S4AFP	IC	1	
C731	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC2	VS13067	IC	1	
C732	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC3	74F573SJ	IC	1	
C733, 34	ECEV1EN4R70	E. CAPACITOR CH 25V 4.7U	2		IC4	74F138SJ	IC	1	
C735	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC5	74F573SJ	IC	1	
C736	ECA1CAXN330	E. CAPACITOR 16V 33U	1		IC6	TL7705CP8B	IC	1	
C737	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC7	MC74HC132AF	IC	1	
C738	ECA1CAXN330	E. CAPACITOR 16V 33U	1		IC8	MC74HC04AF	IC	1	
C739, 40	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC9, 10	74AC32SJ	IC	2	
C741	ECEV1EN4R70	E. CAPACITOR CH 25V 4.7U	1		IC11, 12	74F32SJ	IC	2	
C742	ECUM1H120JCN	C. CAPACITOR CH 50V 12P	1		IC13	MC74HC74AF	IC	1	
C743	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC14	74F11SJ	IC	1	
C744, 45	ECEV1EN4R70	E. CAPACITOR CH 25V 4.7U	2		IC15	IDT71321A55	IC	1	
C746	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC16	74F245SJ	IC	1	
C747-61	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	15		IC17	DS1230Y100	IC	1	
C762	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		IC19, 20	74F541SJ	IC	2	
C763	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC23	74F245SJ	IC	1	
C764	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		IC24	UPD6456T611Y	IC	1	
C765	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC25	74F138SJ	IC	1	
C766	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		IC26	MB89363BHPF	IC	1	
C767	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC27, 28	M54649L	IC	2	
C768	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		IC29	NJM2901M	IC	1	
C769	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC30	NJM2904M	IC	1	
C770	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1		IC31, 32	MC14538BF	IC	2	
C771	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1		IC33	74F32SJ	IC	1	
C772, 73	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC34	74F00SJ	IC	1	
C774	ECEV1EN4R70	E. CAPACITOR CH 25V 4.7U	1		IC35	NJM2901M	IC	1	
C775	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC36, 37	TC7S14F	IC	2	
C776	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC500	HD64180ZRP8	IC	1	
C777-80	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC501, 02	MC74HC541AF	IC	2	
C781, 82	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC503	VS13063	IC	1	
C783	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC504	K6256DLG7L	IC	1	
C784	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC505	IDT71321A55	IC	1	
C785	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC506	MC74HC138AF	IC	1	
C900, 01	ECEV1CV4700	E. CAPACITOR CH 16V 47U	2		IC507	74F32SJ	IC	1	
C902, 03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC508	MC74HC00AF	IC	1	
C904-07	ECEV1CV4700	E. CAPACITOR CH 16V 47U	4		IC509	T74HC191AF	IC	1	
					IC510	Z84C4310FEC	IC	1	
D1	MA157	DIODE	1		IC514	MC34051M	IC	1	
D2-D5	MA715	DIODE	4		IC515	MC1488M	IC	1	
D8	MA152WK	DIODE	1		IC516	MC1489AM	IC	1	
D9	MA3068-H	DIODE	1		IC517	MC14024BF	IC	1	
D10	MA3051-H	DIODE	1		IC523	MC74HC04AF	IC	1	
D11	MA3047-M	DIODE	1		IC524	MC14050BF	IC	1	
D12	MA3100-M	DIODE	1		IC525	SN74LS38NS	IC	1	
D13	MA3051-H	DIODE	1		IC527	MB89363BPF	IC	1	
D14	MA3075-M	DIODE	1		IC528, 29	MC14021BF	IC	2	
D15	21D004	DIODE	1		IC530, 31	T74HC191AF	IC	2	
D16	MA3051-H	DIODE	1		IC532	MC74HC574AF	IC	1	
D17	MA157	DIODE	1		IC701	M37702S4AFP	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC702	VSI3071	IC	1		QR33, 34	UN2214	TRANSISTOR-RESISTOR	2	
IC703	K6256DLG7L	IC	1		QR35, 36	UN2113	TRANSISTOR-RESISTOR	2	
IC704	74F573SJ	IC	1		QR37, 38	UN2213	TRANSISTOR-RESISTOR	2	
IC705, 06	74F138SJ	IC	2		QR39, 40	UN2113	TRANSISTOR-RESISTOR	2	
IC707, 08	74F32SJ	IC	2		QR41	UN2213	TRANSISTOR-RESISTOR	1	
IC709	74F00SJ	IC	1		QR42	UN2113	TRANSISTOR-RESISTOR	1	
IC710	MN51040VP1	IC	1		QR43	UN2213	TRANSISTOR-RESISTOR	1	
IC711	MC74HC574AF	IC	1		QR701-03	UN221L	TRANSISTOR-RESISTOR	3	
IC712	74AC32SJ	IC	1		QR704, 05	UN2214	TRANSISTOR-RESISTOR	2	
IC713	74F32SJ	IC	1						
IC714, 15	74F541SJ	IC	2		R1-R5	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	5	
IC716	74F245SJ	IC	1		R6-10	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5	
IC717	74F541SJ	IC	1		R11, 12	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	2	
IC718	MC14053BF	IC	1		R13, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC719	NJM4560MD	IC	1		R16	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
IC720	NJM2068MD	IC	1		R17	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
IC721	UPC319G2	IC	1		R18, 19	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
IC722	UPC4741G2	IC	1		R20	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC723	NJM78L09UA	IC	1		R21, 22	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IC724	NJM79L09UA	IC	1		R23, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC725, 26	NJM084M	IC	2		R25, 26	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
					R27, 28	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IS2	VJS2336A032	CONNECTOR (FEMALE)	1		R29	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IS17	VJS3096628	CONNECTOR (FEMALE)	1		R33-35	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
IS503	VJS2336A032	CONNECTOR (FEMALE)	1		R38, 39	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IS702	VJS2336A032	CONNECTOR (FEMALE)	1		R43	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
					R44	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
L1	VL00163J270	COIL 27UH	1		R45	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L2	VL00319K470	COIL 47UH	1		R46	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
L500-03	VL00576	COIL	4		R47	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L701	VL00163J470	COIL 47UH	1		R48	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
L900-03	VLP0133	COIL	4		R49	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
					R54, 55	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
LED1-D4	LN1251CAL	DIODE	4		R56	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
					R57	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R58-61	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	4	
					R62	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q3	2SB710A-R	TRANSISTOR	1		R63-70	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	8	
Q4	2SB936A-0	TRANSISTOR	1		R71, 72	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q5, 06	2SD601A-R	TRANSISTOR	2		R73, 74	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
Q7, 08	2SB1073-R	TRANSISTOR	2		R75	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
Q9	2SD601A-R	TRANSISTOR	1		R76, 77	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
Q10	2SB709A-R	TRANSISTOR	1		R82	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
Q11, 12	2SD1119-R	TRANSISTOR	2		R83	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q13	2SB709A-R	TRANSISTOR	1		R84-87	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	4	
Q14	2SD601A-R	TRANSISTOR	1		R89	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
Q15, 16	2SB1073-R	TRANSISTOR	2		R90-95	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	6	
Q17	2SD601A-R	TRANSISTOR	1		R96	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q18	2SB709A-R	TRANSISTOR	1		R97	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
Q19, 20	2SD1119-R	TRANSISTOR	2		R100	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q21	2SB709A-R	TRANSISTOR	1		R101, 02	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q22	2SD601A-R	TRANSISTOR	1		R103, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
Q23, 24	2SB1175-0	TRANSISTOR	2		R105	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q25	2SD601A-R	TRANSISTOR	1		R106	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
Q26	2SB709A-R	TRANSISTOR	1		R108	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q27, 28	2SD1747P0Y	TRANSISTOR	2		R109, 10	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q29	2SB709A-R	TRANSISTOR	1		R111, 12	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
Q30	2SD601A-R	TRANSISTOR	1		R113	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q31, 32	2SB1073-R	TRANSISTOR	2		R114	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
Q33	2SD601A-R	TRANSISTOR	1		R116	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q34	2SB709A-R	TRANSISTOR	1		R117, 18	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q35, 36	2SD1119-R	TRANSISTOR	2		R119, 20	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
Q37	2SB709A-R	TRANSISTOR	1		R121	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q38	2SD601A-R	TRANSISTOR	1		R122	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
Q39	2SB1175-0	TRANSISTOR	1		R124	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q701-03	2SD601A-R	TRANSISTOR	3		R125, 26	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q704, 05	2SB709A-R	TRANSISTOR	2		R127, 28	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
					R129-37	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	9	
QR3-10	UN2213	TRANSISTOR-RESISTOR	8		R138, 39	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
QR11-16	UN2214	TRANSISTOR-RESISTOR	6		R141, 42	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
QR17	UN2213	TRANSISTOR-RESISTOR	1		R144	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
QR18-26	UN2214	TRANSISTOR-RESISTOR	9		R145-47	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
QR27, 28	UN2113	TRANSISTOR-RESISTOR	2		R148	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
QR29, 30	UN2214	TRANSISTOR-RESISTOR	2		R150	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
QR31, 32	UN2113	TRANSISTOR-RESISTOR	2		R151	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R152	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R266-69	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R153	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R271	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R154	EX1S.J1R0	M.RESISTOR 1W 1.0	1		R273	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R155	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R275	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R156	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R277	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R157	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R281	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R158	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R284, 85	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R159	ERG1S.J220	M.RESISTOR 1W 22	1		R288	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R160	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R290	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R161	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R291	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R162, 63	ERJ8GCYJ151	M.RESISTOR CH 1/8W 150	2		R292, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R164, 65	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2		R294	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R166	ERJ8GCYJ152	M.RESISTOR CH 1/8W 1.5K	1		R295	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R167-69	ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	3		R296	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R170	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R297	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R171	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R298	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R172, 73	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2		R299	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R174-81	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		R304-15	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	12	
R182	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R316, 17	ERG1S.J100	M.RESISTOR 1W 10	2	
R184	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R318	EX1S.J6R2	M.RESISTOR 1W 6.2	1	
R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R319	ERG1S.J100	M.RESISTOR 1W 10	1	
R186	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R187-90	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	4		R321-28	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
R191	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R329, 30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R192	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R332	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R193, 94	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R333	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R195	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R334	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R196, 97	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R335	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R198	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R336	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R199, 00	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R337, 38	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R201	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R341	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R202	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R342	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R203, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R205	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R346	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R206	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R347	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R207, 08	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R209	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R349-62	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	14	
R210, 11	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R363, 64	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	2	
R212	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R365	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R213, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R366	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R215	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R500	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R216, 17	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R501	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R218	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R502, 03	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R219, 20	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R504-11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R221	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R512	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R222	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R513, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R223, 24	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R517	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R225	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R518, 19	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R226	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R520	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R227, 28	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R529-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R229	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R532, 33	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R230, 31	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R534	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R232	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R233, 34	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R545	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R235	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R546	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R236, 37	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R548, 49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R238	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R550, 51	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R239, 40	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R554-58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5	
R241	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R580	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R242	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R585	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R243, 44	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R598	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R599	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R246	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R606, 07	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R247, 48	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R608	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R249	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R610-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R250, 51	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R618-20	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3	
R252	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R621-28	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R253, 54	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R630	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R255	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R633	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R256, 57	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R635	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R258	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R637	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R259, 60	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R640	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R261	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R641	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R262	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R701	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R263	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R702	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R705-10	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	6		R869	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R711-16	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	6		R870	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R717	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R871, 72	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R718	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R873	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R719, 20	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2		R874, 75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R721, 22	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2		R876	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R723-26	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	4		R877, 78	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R727	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		R879, 80	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R728-31	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	4		R881	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R732-34	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3		R882, 83	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R735	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R884	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R736	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1		R885	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R737	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		R886	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R738	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1		R887, 88	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R739, 40	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R890	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R741, 42	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	2		R891	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R743, 44	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2		R892	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R745, 46	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2		R893	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R747	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1		R894	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R748	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R895	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R749, 50	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R900-03	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	4	
R751	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1						
R752, 53	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		SW501	VSS0367-08B	SWITCH	1	
R754	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1						
R755	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		TG1	EYF6CU	TEST POINT	1	
R756-59	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	4		TG701	EYF6CU	TEST POINT	1	
R762	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1						
R764, 65	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2		TP8	EYF6CU	TEST POINT	1	
R766	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1						
R767-69	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3		VC1	VCV0049	TRIMMER	1	
R770	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1						
R771	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		X1	VSX0641	CRYSTAL OSCILLATOR	1	
R772	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		X500	VSX0641	CRYSTAL OSCILLATOR	1	
R773	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1		X701	VSX0465	CRYSTAL OSCILLATOR	1	
R774	ERJ6GEYG220	M. RESISTOR CH 1/10W 22	1		X702	VSX0498	CRYSTAL OSCILLATOR	1	
R775, 76	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2		X703	VSX0615	CRYSTAL OSCILLATOR	1	
R777	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1						
R778-81	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	4						
R782	ERJ6RED470	M. RESISTOR CH 1/10W 47	1						
R783	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1						
R784	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1			VML2143	CARD PULLER	1	
R785	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1			VML2144	CARD PULLER	1	
R786	ERJ6RED820	M. RESISTOR CH 1/10W 82	1						
R787	ERJ6RED470	M. RESISTOR CH 1/10W 47	1						
R788	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1						
R789	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1						
R790	ERJ6RBD123	M. RESISTOR CH 1/10W 12K	1						
R791	ERJ6RBD683	M. RESISTOR CH 1/10W 68K	1						
R792	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1						
R793	ERJ6RBD333	M. RESISTOR CH 1/10W 33K	1						
R794, 95	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2						
R796	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1						
R797, 98	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2						
R799	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1						
R800, 01	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2						
R802	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1						
R803, 04	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2						
R805-08	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	4						
R809	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1						
R810	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1						
R811, 12	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2						
R813	ERJ6GEYG824	M. RESISTOR CH 1/10W 820K	1						
R814	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1						
R815	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1						
R816-39	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	24						
R840-47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8						
R848-56	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	9						
R857	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1						
R858, 59	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2						
R860-62	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	3						
R863, 64	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2						
R865	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1						
R866	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1						
R867	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1						
R868	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C68, 69	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		C904-07	ECEVICV4700	E. CAPACITOR CH 16V 47U	4	
C70, 71	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D1	MA157	DIODE	1	
C72	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		D2-D5	MA715	DIODE	4	
C73	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D8	MA152WK	DIODE	1	
C74	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		D9	MA3068-H	DIODE	1	
C76	ECA12HG682	E. CAPACITOR 6800U	1		D10	MA3051-H	DIODE	1	
C77, 78	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D11	MA3047-M	DIODE	1	
C79	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1		D12	MA3100-M	DIODE	1	
C81	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	1		D13	MA3051-H	DIODE	1	
C83	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D14	MA3075-M	DIODE	1	
C86, 87	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D15	21D004	DIODE	1	
C88-90	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3		D16	MA3051-H	DIODE	1	
C91, 92	ECUM1C105ZFN	C. CAPACITOR CH 16V 1U	2		D17	MA157	DIODE	1	
C93	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		D18-22	MA152WK	DIODE	5	
C500, 01	ECUV1H120JCN	C. CAPACITOR CH 50V 12P	2		D25-27	MA152WK	DIODE	3	
C502	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D28-43	MA738	DIODE	16	
C503-06	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		D44	MA152WK	DIODE	1	
C508-13	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	6		D45-48	MA738	DIODE	4	
C514	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D49, 50	SN74S1051NS	IC	2	
C516-19	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		D51	MA3062-L	DIODE	1	
C520	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D52	MA3082M	DIODE	1	
C523	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1		D53	MA3075-M	DIODE	1	
C526, 27	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2		D54	MA738	DIODE	1	
C532-35	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4		D500	MA152WK	DIODE	1	
C537, 38	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		D504, 05	MA715	DIODE	2	
C543-45	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		D506	MA152WK	DIODE	1	
C547	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D507	MA715	DIODE	1	
C548	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D701-06	MA715	DIODE	6	
C549, 50	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		D709	MA715	DIODE	1	
C703-13	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	11		D711-14	MA157	DIODE	4	
C714	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		D715	MA152WK	DIODE	1	
C715, 16	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2		D716-19	MA715	DIODE	4	
C717-21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5		D720-22	SN74S1051NS	IC	3	
C722, 23	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	2		D723, 24	MA715	DIODE	2	
C724, 25	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		FL701, 02	VLF1016A470	FILTER	2	
C726	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1		FL900-03	VLF1016A470	FILTER	4	
C727	ECUM1H050CCN	C. CAPACITOR CH 50V 5P	1		IC1	M37702S4AFP	IC	1	
C728	ECEVOJV4700	E. CAPACITOR CH6, 3V 47U	1		IC2	VS13068	IC	1	
C729	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		IC3	74F573SJ	IC	1	
C730	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		IC4	74F138SJ	IC	1	
C731	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		IC5	74F573SJ	IC	1	
C732	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC6	TL7705CPSB	IC	1	
C733, 34	ECEVIEN4R70	E. CAPACITOR CH 25V 4.7U	2		IC7	MC74HC132AF	IC	1	
C735	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC8	MC74HC04AF	IC	1	
C736	ECA1CAXN330	E. CAPACITOR 16V 33U	1		IC9, 10	74AC32SJ	IC	2	
C737	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC11, 12	74F32SJ	IC	2	
C738	ECA1CAXN330	E. CAPACITOR 16V 33U	1		IC13	MC74HC74AF	IC	1	
C739, 40	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC14	74F11SJ	IC	1	
C741	ECEVIEN4R70	E. CAPACITOR CH 25V 4.7U	1		IC15	1DT71321A55	IC	1	
C742	ECUV1H120JCN	C. CAPACITOR CH 50V 12P	1		IC16	74F245SJ	IC	1	
C743	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		IC17	DS1230Y100	IC	1	
C744, 45	ECEVIEN4R70	E. CAPACITOR CH 25V 4.7U	2		IC19, 20	74F541SJ	IC	2	
C746	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC23	74F245SJ	IC	1	
C747-61	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	15		IC24	UPD6456T611Y	IC	1	
C762	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC25	74F138SJ	IC	1	
C763	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC26	MB89363BHPF	IC	1	
C764	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC27, 28	M54649L	IC	2	
C765	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC29	NJM2901M	IC	1	
C766	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC30	NJM2904M	IC	1	
C767	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC31, 32	MC14538BF	IC	2	
C768	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC33	74F32SJ	IC	1	
C769	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC34	74F00SJ	IC	1	
C770	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1		IC35	NJM2901M	IC	1	
C771	ECUM1H821JCN	C. CAPACITOR CH 50V 820P	1		IC36, 37	TC7S14F	IC	2	
C772, 73	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC500	HD64180ZRP8	IC	1	
C774	ECEVIEN4R70	E. CAPACITOR CH 25V 4.7U	1		IC501, 02	MC74HC541AF	IC	2	
C775	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC503	VS13064	IC	1	
C776	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC504	K6256DLG7L	IC	1	
C777-80	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC505	1DT71321A55	IC	1	
C781, 82	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC506	MC74HC138AF	IC	1	
C783	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC507	74F32SJ	IC	1	
C784	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC508	MC74HC00AF	IC	1	
C785	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C900, 01	ECEVICV4700	E. CAPACITOR CH 16V 47U	2						
C902, 03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC509	T74HC191AF	IC	1		Q35, 36	2SD1119-R	TRANSISTOR	2	
IC510	Z84C4310FEC	IC	1		Q37	2SB709A-R	TRANSISTOR	1	
IC514	MC34051M	IC	1		Q38	2SD601A-R	TRANSISTOR	1	
IC515	MC1488M	IC	1		Q39	2SB1175-Q	TRANSISTOR	1	
IC516	MC1489AM	IC	1		Q701-03	2SD601A-R	TRANSISTOR	3	
IC517	MC14024BF	IC	1		Q704, 05	2SB709A-R	TRANSISTOR	2	
IC523	MC74HC04AF	IC	1						
IC524	MC14050BF	IC	1		QR3-10	UN2213	TRANSISTOR-RESISTOR	8	
IC525	SN74LS38NS	IC	1		QR11-16	UN2214	TRANSISTOR-RESISTOR	6	
IC527	MB89363BPF	IC	1		QR17	UN2213	TRANSISTOR-RESISTOR	1	
IC528, 29	MC14021BF	IC	2		QR18-26	UN2214	TRANSISTOR-RESISTOR	9	
IC530, 31	T74HC191AF	IC	2		QR27, 28	UN2113	TRANSISTOR-RESISTOR	2	
IC532	MC74HC574AF	IC	1		QR29, 30	UN2214	TRANSISTOR-RESISTOR	2	
IC701	M37702S4AFP	IC	1		QR31, 32	UN2113	TRANSISTOR-RESISTOR	2	
IC702	VS13070	IC	1		QR33, 34	UN2214	TRANSISTOR-RESISTOR	2	
IC703	K6256DLG7L	IC	1		QR35, 36	UN2113	TRANSISTOR-RESISTOR	2	
IC704	74F573SJ	IC	1		QR37, 38	UN2213	TRANSISTOR-RESISTOR	2	
IC705, 06	74F138SJ	IC	2		QR39, 40	UN2113	TRANSISTOR-RESISTOR	2	
IC707, 08	74F32SJ	IC	2		QR41	UN2213	TRANSISTOR-RESISTOR	1	
IC709	74F00SJ	IC	1		QR42	UN2113	TRANSISTOR-RESISTOR	1	
IC710	MN51040VPI	IC	1		QR43	UN2213	TRANSISTOR-RESISTOR	1	
IC711	MC74HC574AF	IC	1		QR701-03	UN221L	TRANSISTOR-RESISTOR	3	
IC712	74AC32SJ	IC	1		QR704, 05	UN2214	TRANSISTOR-RESISTOR	2	
IC713	74F32SJ	IC	1						
IC714, 15	74F541SJ	IC	2		R1-R5	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	5	
IC716	74F245SJ	IC	1		R6-10	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	5	
IC717	74F541SJ	IC	1		R11, 12	ERJ6GEYF822	M. RESISTOR CH 1/10W 8.2K	2	
IC718	MC14053BF	IC	1		R13, 14	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
IC719	NJM4560MD	IC	1		R16	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
IC720	NJM2068MD	IC	1		R17	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
IC721	UPC31962	IC	1		R18, 19	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
IC722	UPC4741G2	IC	1		R20	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IC723	NJM78L09UA	IC	1		R21, 22	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
IC724	NJM79L09UA	IC	1		R23, 24	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
IC725, 26	NJM084M	IC	2		R25, 26	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
					R27, 28	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
IS2	VJS2336A032	CONNECTOR (FEMALE)	1		R29	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IS17	VJS3096628	CONNECTOR (FEMALE)	1		R33-35	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
IS503	VJS2336A032	CONNECTOR (FEMALE)	1		R38, 39	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
IS702	VJS2336A032	CONNECTOR (FEMALE)	1		R43	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
					R44	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
L1	VL00163J270	COIL 27UH	1		R45	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
L2	VL00319K470	COIL 47UH	1		R46	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
L500-03	VL00576	COIL	4		R47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
L701	VL00163J470	COIL 47UH	1		R48	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
L900-03	VLP0133	COIL	4		R49	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R54, 55	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
LED1-D4	LN1251CAL	DIODE	4		R56	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
					R57	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R58-61	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	4	
					R62	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q3	2SB710A-R	TRANSISTOR	1		R63-70	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	8	
Q4	2SB936A-Q	TRANSISTOR	1		R71, 72	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q5, 06	2SD601A-R	TRANSISTOR	2		R73, 74	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
Q7, 08	2SB1073-R	TRANSISTOR	2		R75	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
Q9	2SD601A-R	TRANSISTOR	1		R76, 77	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
Q10	2SB709A-R	TRANSISTOR	1		R82	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
Q11, 12	2SD1119-R	TRANSISTOR	2		R83	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q13	2SB709A-R	TRANSISTOR	1		R84-88	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	5	
Q14	2SD601A-R	TRANSISTOR	1		R90-95	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	6	
Q15, 16	2SB1073-R	TRANSISTOR	2		R96	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q17	2SD601A-R	TRANSISTOR	1		R97	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q18	2SB709A-R	TRANSISTOR	1		R100	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q19, 20	2SD1119-R	TRANSISTOR	2		R101, 02	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q21	2SB709A-R	TRANSISTOR	1		R103, 04	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
Q22	2SD601A-R	TRANSISTOR	1		R105	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q23, 24	2SB1175-Q	TRANSISTOR	2		R106	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q25	2SD601A-R	TRANSISTOR	1		R108	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q26	2SB709A-R	TRANSISTOR	1		R109, 10	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q27, 28	2SD1747POY	TRANSISTOR	2		R111, 12	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
Q29	2SB709A-R	TRANSISTOR	1		R113	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
Q30	2SD601A-R	TRANSISTOR	1		R114	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
Q31, 32	2SB1073-R	TRANSISTOR	2		R116	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q33	2SD601A-R	TRANSISTOR	1		R117, 18	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
Q34	2SB709A-R	TRANSISTOR	1		R119, 20	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R121	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R246	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R122	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R247, 48	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R124	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R249	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R125, 26	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R250, 51	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R127, 28	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R252	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R129-37	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	9		R253, 54	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R138, 39	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R255	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R141, 42	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R256, 57	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R144	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R258	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R145-47	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3		R259, 60	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R148	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R261	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R150	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R262	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R151	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R263	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R152	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R266-69	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R153	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R271	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R154	ERX1SJ1R0	M.RESISTOR 1W 1.0	1		R273	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R155	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R275	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R156	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R277	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R157	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R281	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R158	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R284, 85	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R159	ERG1SJ220	M.RESISTOR 1W 22	1		R288	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R160	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R290	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R161	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R291	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R162, 63	ERJ8GCYJ151	M.RESISTOR CH 1/8W 150	2		R292, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R164, 65	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2		R294	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R166	ERJ8GCYJ152	M.RESISTOR CH 1/8W 1.5K	1		R295	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R167-69	ERJ8GCYJ681	M.RESISTOR CH 1/8W 680	3		R296	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R170	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R297	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R171	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R298	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R172, 73	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2		R299	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R174-81	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		R304-15	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	12	
R182	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R316, 17	ERG1SJ100	M.RESISTOR 1W 10	2	
R184	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R318	ERX1SJ6R2	M.RESISTOR 1W 6.2	1	
R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R319	ERG1SJ100	M.RESISTOR 1W 10	1	
R186	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R187-90	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	4		R321-28	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
R191	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R329, 30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R192	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R332	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R193, 94	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R333	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R195	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R334	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R196, 97	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R335	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R198	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R336	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R199, 00	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R337, 38	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R201	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R341	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R202	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R342	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R203, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R205	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R346	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R206	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R347	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R207, 08	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R209	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R349-62	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	14	
R210, 11	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R363, 64	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	2	
R212	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R365	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R213, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R366	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R215	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R500	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R216, 17	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R501	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R218	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R502, 03	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R219, 20	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R504-11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R221	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R512	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R222	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R513, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R223, 24	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R517	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R225	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R518, 19	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R226	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R520	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R227, 28	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R529-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R229	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R532, 33	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R230, 31	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R534	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R232	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R233, 34	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R545	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R235	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R546	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R236, 37	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R548, 49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R238	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R550, 51	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R239, 40	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R554-58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5	
R241	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R580	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R242	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R585	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R243, 44	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R598	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R599	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R606, 07	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R608	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R610-13	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R618-20	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	3	
R621-28	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R630	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R633	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R635	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R637	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R640	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R641	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R701	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R702	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R705-10	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	6	
R711-16	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	6	
R717	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R718	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R719, 20	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R721, 22	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R723-26	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	4	
R727	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R728-31	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	4	
R732-34	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	
R735	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R736	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R737	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R738	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R739, 40	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R741, 42	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	2	
R743, 44	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R745, 46	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R747	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R748	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R749, 50	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R751	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R752, 53	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R754	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R755	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R756-59	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	4	
R760	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R762	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R764, 65	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R766	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R767-69	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R770	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R771	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R772	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R773	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1	
R774	ERJ6GEYG220	M. RESISTOR CH 1/10W 22	1	
R775, 76	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2	
R777	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R778-81	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	4	
R782	ERJ6RED470	M. RESISTOR CH 1/10W 47	1	
R783	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R784	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R785	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R786	ERJ6RED820	M. RESISTOR CH 1/10W 82	1	
R787	ERJ6RED470	M. RESISTOR CH 1/10W 47	1	
R788	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R789	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R790	ERJ6RBD123	M. RESISTOR CH 1/10W 12K	1	
R791	ERJ6RBD683	M. RESISTOR CH 1/10W 68K	1	
R792	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R793	ERJ6RBD333	M. RESISTOR CH 1/10W 33K	1	
R794, 95	ERJ6GEYG222	M. RESISTOR CH 1/10W 22K	2	
R796	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R797, 98	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2	
R799	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R800, 01	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R802	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R803, 04	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	2	
R805-08	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	4	
R809	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R810	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R811, 12	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R813	ERJ6GEYG824	M. RESISTOR CH 1/10W 820K	1	
R814	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R815	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R816-39	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	24	
R840-47	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R848-56	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	9	
R857	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R858, 59	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R860-62	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	3	
R863, 64	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	2	
R865	ERJ6RBD562	M. RESISTOR CH 1/10W 5.6K	1	
R866	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R867	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R868	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R869	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R870	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R871, 72	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R873	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R874, 75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R876	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R877, 78	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R879, 80	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R881	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R882, 83	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R884	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R885	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1	
R886	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R887, 88	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	2	
R890	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R891	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R892	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R893	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R894	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R895	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
R900-03	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	4	
SW501	VSS0367-08B	SWITCH	1	
TG1	EYF6CU	TEST POINT	1	
TG701	EYF6CU	TEST POINT	1	
TP8	EYF6CU	TEST POINT	1	
VC1	VCV0049	TRIMMER	1	
X1	VSX0641	CRYSTAL OSCILLATOR	1	
X500	VSX0641	CRYSTAL OSCILLATOR	1	
X701	VSX0465	CRYSTAL OSCILLATOR	1	
X702	VSX0498	CRYSTAL OSCILLATOR	1	
X703	VSX0614	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	
E3	VEP86146Q	F2 SYSCON P.C. BOARD	1	(RTL)FOR AJ-D440E
C1	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C9	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C10, 11	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	2	
C12	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C13	ECOB1H104JF	P. CAPACITOR 50V 0.1U	1	
C14	ECEV1E104R7Q	E. CAPACITOR CH 25V 4.7U	1	
C15	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C16-26	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	11	
C27	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C29	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C30	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C32-34	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C35	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C769	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C36, 37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C770	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1	
C38, 39	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C771	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
C46	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C772, 73	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C47	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C774	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	1	
C49	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		C775	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C51	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		C776	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C53	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		C777-80	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C55	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		C781, 82	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C56-58	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3		C783	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C59, 60	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2		C784	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C65	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		C785	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C66	ECA12HG682	E.CAPACITOR 6800U	1		C900, 01	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2	
C67	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C902, 03	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C68, 69	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C904-07	ECEV1CV4700	E.CAPACITOR CH 16V 47U	4	
C70, 71	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2						
C72	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		D1	MA157	DIODE	1	
C73	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D2-D5	MA715	DIODE	4	
C74	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		D8	MA152WK	DIODE	1	
C76	ECA12HG682	E.CAPACITOR 6800U	1		D9	MA3068-H	DIODE	1	
C77, 78	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		D10	MA3051-H	DIODE	1	
C79	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		D11	MA3047-M	DIODE	1	
C81	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		D12	MA3100-M	DIODE	1	
C83	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D13	MA3051-H	DIODE	1	
C86, 87	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		D14	MA3075-M	DIODE	1	
C88-90	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		D15	21D004	DIODE	1	
C91, 92	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2		D16	MA3051-H	DIODE	1	
C93	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		D17	MA157	DIODE	1	
C500, 01	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	2		D18-22	MA152WK	DIODE	5	
C502	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		D25-27	MA152WK	DIODE	3	
C503-06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4		D28-43	MA738	DIODE	16	
C508-13	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	6		D44	MA152WK	DIODE	1	
C514	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D45-48	MA738	DIODE	4	
C516-19	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4		D49, 50	SN74S1051NS	IC	2	
C520	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		D51	MA3062-L	DIODE	1	
C523	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1		D52	MA3082M	DIODE	1	
C526, 27	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	2		D53	MA3075-M	DIODE	1	
C532-35	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	4		D54	MA738	DIODE	1	
C537, 38	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		D500	MA152WK	DIODE	1	
C543-45	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3		D504, 05	MA715	DIODE	2	
C547	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		D506	MA152WK	DIODE	1	
C548	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D507	MA715	DIODE	1	
C549, 50	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		D701-06	MA715	DIODE	6	
C703-13	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	11		D709	MA715	DIODE	1	
C714	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		D711-14	MA157	DIODE	4	
C715, 16	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2		D715	MA152WK	DIODE	1	
C717-21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5		D716-19	MA715	DIODE	4	
C722, 23	ECUM1H1000JCN	C.CAPACITOR CH 50V 10P	2		D720-22	SN74S1051NS	IC	3	
C724, 25	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		D723, 24	MA715	DIODE	2	
C726	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1						
C727	ECUM1H0500JCN	C.CAPACITOR CH 50V 5P	1		FL701, 02	VLF1016A470	FILTER	2	
C728	ECEV0JV4700	E.CAPACITOR CH6.3V 47U	1		FL900-03	VLF1016A470	FILTER	4	
C729	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1						
C730	ECUX1H682KBN	C.CAPACITOR CH 50V 6800P	1		IC1	M37702S4AFP	IC	1	
C731	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		IC2	VS13069	IC	1	
C732	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC3	74F573SJ	IC	1	
C733, 34	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	2		IC4	74F138SJ	IC	1	
C735	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC5	74F573SJ	IC	1	
C736	ECA1CAXN330	E.CAPACITOR 16V 33U	1		IC6	TL7705QPSB	IC	1	
C737	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC7	MC74HC132AF	IC	1	
C738	ECA1CAXN330	E.CAPACITOR 16V 33U	1		IC8	MC74HC04AF	IC	1	
C739, 40	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		IC9, 10	74AC32SJ	IC	2	
C741	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	1		IC11, 12	74F32SJ	IC	2	
C742	ECUM1H120JCN	C.CAPACITOR CH 50V 12P	1		IC13	MC74HC74AF	IC	1	
C743	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		IC14	74F11SJ	IC	1	
C744, 45	ECEV1EN4R70	E.CAPACITOR CH 25V 4.7U	2		IC15	1DT71321A55	IC	1	
C746	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC16	74F245SJ	IC	1	
C747-61	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	15		IC17	DS1230Y100	IC	1	
C762	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC19, 20	74F541SJ	IC	2	
C763	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC23	74F245SJ	IC	1	
C764	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC24	UPD6456T611Y	IC	1	
C765	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC25	74F138SJ	IC	1	
C766	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC26	MB89363BHPF	IC	1	
C767	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		IC27, 28	M54649L	IC	2	
C768	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		IC29	NJM2901M	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC30	NUM2904M	IC	1		Q17	2SD601A-R	TRANSISTOR	1	
IC31, 32	MC14538BF	IC	2		Q18	2SB709A-R	TRANSISTOR	1	
IC33	74F32SJ	IC	1		Q19, 20	2SD1119-R	TRANSISTOR	2	
IC34	74F00SJ	IC	1		Q21	2SB709A-R	TRANSISTOR	1	
IC35	NUM2901M	IC	1		Q22	2SD601A-R	TRANSISTOR	1	
IC36, 37	TC7S14F	IC	2		Q23, 24	2SB1175-Q	TRANSISTOR	2	
IC500	HD64180ZRP8	IC	1		Q25	2SD601A-R	TRANSISTOR	1	
IC501, Q2	MC74HC541AF	IC	2		Q26	2SB709A-R	TRANSISTOR	1	
IC503	VS13065	IC	1		Q27, 28	2SD1747POY	TRANSISTOR	2	
IC504	K6256DLG7L	IC	1		Q29	2SB709A-R	TRANSISTOR	1	
IC505	IDT71321A55	IC	1		Q30	2SD601A-R	TRANSISTOR	1	
IC506	MC74HC138AF	IC	1		Q31, 32	2SB1073-R	TRANSISTOR	2	
IC507	74F32SJ	IC	1		Q33	2SD601A-R	TRANSISTOR	1	
IC508	MC74HC00AF	IC	1		Q34	2SB709A-R	TRANSISTOR	1	
IC509	T74HC191AF	IC	1		Q35, 36	2SD1119-R	TRANSISTOR	2	
IC510	Z84C4310FEC	IC	1		Q37	2SB709A-R	TRANSISTOR	1	
IC514	MC34051M	IC	1		Q38	2SD601A-R	TRANSISTOR	1	
IC515	MC1488M	IC	1		Q39	2SB1175-Q	TRANSISTOR	1	
IC516	MC1489AM	IC	1		Q701-Q3	2SD601A-R	TRANSISTOR	3	
IC517	MC14024BF	IC	1		Q704, 05	2SB709A-R	TRANSISTOR	2	
IC523	MC74HC04AF	IC	1						
IC524	MC14050BF	IC	1		QR3-10	UN2213	TRANSISTOR-RESISTOR	8	
IC525	SN74LS38NS	IC	1		QR11-16	UN2214	TRANSISTOR-RESISTOR	6	
IC527	MB89363BPF	IC	1		QR17	UN2213	TRANSISTOR-RESISTOR	1	
IC528, 29	MC14021BF	IC	2		QR18-26	UN2214	TRANSISTOR-RESISTOR	9	
IC530, 31	T74HC191AF	IC	2		QR27, 28	UN2113	TRANSISTOR-RESISTOR	2	
IC532	MC74HC574AF	IC	1		QR29, 30	UN2214	TRANSISTOR-RESISTOR	2	
IC701	M37702S4AFP	IC	1		QR31, 32	UN2113	TRANSISTOR-RESISTOR	2	
IC702	VS13071	IC	1		QR33, 34	UN2214	TRANSISTOR-RESISTOR	2	
IC703	K6256DLG7L	IC	1		QR35, 36	UN2113	TRANSISTOR-RESISTOR	2	
IC704	74F573SJ	IC	1		QR37, 38	UN2213	TRANSISTOR-RESISTOR	2	
IC705, 06	74F138SJ	IC	2		QR39, 40	UN2113	TRANSISTOR-RESISTOR	2	
IC707, 08	74F32SJ	IC	2		QR41	UN2213	TRANSISTOR-RESISTOR	1	
IC709	74F00SJ	IC	1		QR42	UN2113	TRANSISTOR-RESISTOR	1	
IC710	MN51040VPI	IC	1		QR43	UN2213	TRANSISTOR-RESISTOR	1	
IC711	MC74HC574AF	IC	1		QR701-Q3	UN221L	TRANSISTOR-RESISTOR	3	
IC712	74AC32SJ	IC	1		QR704, 05	UN2214	TRANSISTOR-RESISTOR	2	
IC713	74F32SJ	IC	1						
IC714, 15	74F541SJ	IC	2						
IC716	74F245SJ	IC	1		R6-10	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5	
IC717	74F541SJ	IC	1		R11, 12	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	2	
IC718	MC14053BF	IC	1		R13, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC719	NUM4560MD	IC	1		R16	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
IC720	NUM2068MD	IC	1		R17	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
IC721	UPC319G2	IC	1		R18, 19	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
IC722	UPC4741G2	IC	1		R20	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC723	NUM78L09UA	IC	1		R21, 22	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IC724	NUM79L09UA	IC	1		R23, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC725, 26	NUM084M	IC	2		R25, 26	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
					R27, 28	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IS2	VJS2336A032	CONNECTOR (FEMALE)	1		R29	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IS17	VJS3096628	CONNECTOR (FEMALE)	1		R33-35	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
IS503	VJS2336A032	CONNECTOR (FEMALE)	1		R38, 39	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
IS702	VJS2336A032	CONNECTOR (FEMALE)	1		R43	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
					R44	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
L1	VL00163J270	COIL 27UH	1		R45	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L2	VL00319K470	COIL 47UH	1		R46	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
L500-Q3	VL00576	COIL	4		R47	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L701	VL00163J470	COIL 47UH	1		R48	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
L900-Q3	VLP0133	COIL	4		R49	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
LED1-D4	LN1251CAL	DIODE	4		R54, 55	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
					R56	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R57	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
					R58-61	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	4	
Q3	2SB710A-R	TRANSISTOR	1		R62	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q4	2SB936A-Q	TRANSISTOR	1		R63-70	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	8	
Q5, 06	2SD601A-R	TRANSISTOR	2		R71, 72	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
Q7, 08	2SB1073-R	TRANSISTOR	2		R73, 74	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
Q9	2SD601A-R	TRANSISTOR	1		R75	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
Q10	2SB709A-R	TRANSISTOR	1		R76, 77	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
Q11, 12	2SD1119-R	TRANSISTOR	2		R82	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
Q13	2SB709A-R	TRANSISTOR	1		R83	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
Q14	2SD601A-R	TRANSISTOR	1		R84-87	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	4	
Q15, 16	2SB1073-R	TRANSISTOR	2		R89	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
					R90-95	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R96	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R225	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R97	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R226	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R100	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R227, 28	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R101, 02	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R229	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R103, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R230, 31	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R105	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R232	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R106	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R233, 34	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R108	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R235	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R109, 10	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R236, 37	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R111, 12	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R238	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R113	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R239, 40	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R114	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R241	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R116	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R242	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R117, 18	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R243, 44	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R119, 20	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R245	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R121	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R246	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R122	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R247, 48	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R124	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R249	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R125, 26	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R250, 51	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R127, 28	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R252	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R129-37	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	9		R253, 54	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R138, 39	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R255	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R141, 42	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R256, 57	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R144	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R258	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R145-47	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3		R259, 60	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R148	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R261	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R150	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R262	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R151	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R263	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R152	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R266-69	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R153	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R271	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R154	ERX1SJ1R0	M.RESISTOR 1W 1.0	1		R273	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R155	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R275	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R156	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R277	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R157	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R281	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R158	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		R284, 85	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R159	ERG1SJ220	M.RESISTOR 1W 22	1		R288	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R160	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R290	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R161	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R291	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R162, 63	ERJ8GCYG151	M.RESISTOR CH 1/8W 150	2		R292, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R164, 65	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2		R294	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R166	ERJ8GCYG152	M.RESISTOR CH 1/8W 1.5K	1		R295	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R167-69	ERJ8GCYG681	M.RESISTOR CH 1/8W 680	3		R296	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R170	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R297	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R171	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R298	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R172, 73	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2		R299	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R174-81	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		R304-15	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	12	
R182	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R316, 17	ERG1SJ100	M.RESISTOR 1W 10	2	
R184	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R318	ERX1SJ6R2	M.RESISTOR 1W 6.2	1	
R185	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R319	ERG1SJ100	M.RESISTOR 1W 10	1	
R186	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R320	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R187-90	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	4		R321-28	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
R191	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R329, 30	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R192	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R332	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R193, 94	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R333	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R195	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R334	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R196, 97	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R335	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R198	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R336	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R199, 00	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R337, 38	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2	
R201	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R341	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R202	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R342	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R203, 04	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R205	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R346	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R206	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R347	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R207, 08	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R348	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R209	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R349-62	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	14	
R210, 11	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R363, 64	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	2	
R212	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R365	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R213, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R366	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R215	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R500	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R216, 17	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R501	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R218	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R502, 03	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R219, 20	ERJ8GCYJ391	M.RESISTOR CH 1/8W 390	2		R504-11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R221	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R512	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R222	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R513, 14	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R223, 24	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R517	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R518, 19	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R791	ERJ6RBD683	M.RESISTOR CH 1/10W 68K	1	
R520	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R792	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R529-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3		R793	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1	
R532, 33	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R794, 95	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R534	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R796	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R542	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R797, 98	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	2	
R545	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R799	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R546	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R800, 01	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R548, 49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2		R802	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R550, 51	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R803, 04	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	2	
R554-58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	5		R805-08	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	4	
R580	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R809	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R585	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R810	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R598	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R811, 12	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R599	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R813	ERJ6GEYG824	M.RESISTOR CH 1/10W 820K	1	
R606, 07	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R814	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R608	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R815	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R610-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4		R816-39	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	24	
R618-20	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3		R840-47	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R621-28	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		R848-56	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	9	
R630	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R857	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R633	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R858, 59	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R635	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R860-62	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R637	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R863, 64	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R640	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R865	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1	
R641	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R866	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R701	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R867	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R702	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R868	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R705-10	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	6		R869	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R711-16	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	6		R870	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R717	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R871, 72	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R718	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R873	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R719, 20	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		R874, 75	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R721, 22	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R876	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R723-26	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	4		R877, 78	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2	
R727	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R879, 80	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R728-31	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	4		R881	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R732-34	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	3		R882, 83	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2	
R735	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R884	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R736	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R885	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R737	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R886	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R738	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R887, 88	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	2	
R739, 40	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R890	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R741, 42	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		R891	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R743, 44	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R892	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R745, 46	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		R893	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R747	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R894	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R748	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R895	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R749, 50	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R900-03	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R751	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1						
R752, 53	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		SW501	VSS0367-08B	SWITCH	1	
R754	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1						
R755	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		TG1	EYF6CU	TEST POINT	1	
R756-59	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	4		TG701	EYF6CU	TEST POINT	1	
R762	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1						
R764, 65	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		TP8	EYF6CU	TEST POINT	1	
R766	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1						
R767-69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		VC1	VCV0049	TRIMMER	1	
R770	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1						
R771	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		X1	VXS0641	CRYSTAL OSCILLATOR	1	
R772	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		X500	VXS0641	CRYSTAL OSCILLATOR	1	
R773	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		X701	VXS0465	CRYSTAL OSCILLATOR	1	
R774	ERJ6GEYG220	M.RESISTOR CH 1/10W 22	1		X702	VXS0498	CRYSTAL OSCILLATOR	1	
R775, 76	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2		X703	VXS0615	CRYSTAL OSCILLATOR	1	
R777	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1						
R778-81	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	4				MISCELLANEOUS		
R782	ERJ6RED470	M.RESISTOR CH 1/10W 47	1						
R783	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1		VML2143	CARD PULLER		1	
R784	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		VML2144	CARD PULLER		1	
R785	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1						
R786	ERJ6RED820	M.RESISTOR CH 1/10W 82	1						
R787	ERJ6RED470	M.RESISTOR CH 1/10W 47	1						
R788	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1						
R789	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1						
R790	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
■ E4	VEP83352C	F4 V OUT P.C. BOARD	1	(RTL)FOR AJ-D450P/D440P	C501	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C100	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C502	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C101	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C503	ECUX1H821JV	C. CAPACITOR CH 50V 820P	1	
C102	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C504	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C103	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C505	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C150-60	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	11		C506, 07	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C200-03	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C508	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C250, 51	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C509	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C252	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C510, 11	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2	
C253-57	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	5		C512	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C258	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1		C513-15	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3	
C261	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C516	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C263	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C517	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C265	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C518	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C267	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C519-21	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3	
C300-02	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C522	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C303	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C523-25	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3	
C304	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C526	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1	
C305	ECEV0JV1010	E. CAPACITOR CH 6.3V 100U	1		C527	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1	
C306, 07	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C528	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C308	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C529	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C309, 10	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C530-33	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C311	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		C534	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C312	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C535-38	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C313	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		C539	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C314-16	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C541	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C317	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		C542	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C318-23	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	6		C545	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C324	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C546	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1	
C325, 26	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C547	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C327	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1		C548	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C328	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1		C549	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1	
C329, 30	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C550	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C331	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1		C551	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C332	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C552	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C333	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1		C553	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C334, 35	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C554	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C336, 37	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	2		C555	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C338	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1		C556	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C339	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1		C557	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C340	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1		C558	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1	
C342	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1		C559, 60	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C343	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1		C561, 62	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	2	
C344	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1		C566	ECUX1H100DCV	C. CAPACITOR CH 50V 10P	1	
C346	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1		C568, 69	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C347	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1		C570	ECEV0JV4700	E. CAPACITOR CH 6.3V 47U	1	
C348, 49	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2		C571	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C350	ECUX1H560JCV	C. CAPACITOR CH 50V 56P	1		C572	ECEV0JV4700	E. CAPACITOR CH 6.3V 47U	1	
C351	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C573-78	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	6	
C352-66	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	15		C600-06	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	7	
C370, 71	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C700-03	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C372	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C705	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C373	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C800, 01	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2	
C374	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C802	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C375	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C803, 04	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C376	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C805	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1	
C377	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C806	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C378	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C807	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C400	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C808, 09	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C401	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C810	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C402-04	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C811-14	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C405	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1		C815	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C406	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C816	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C407	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1		C818	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C408	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1		C819	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C409, 10	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C821	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C412, 13	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C822	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C415	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C824	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C425	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C826	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C500	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C827	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
					C828	ECUX1H020CCV	C. CAPACITOR CH 50V 2P	1	
					C829-32	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
					C833	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
					C834	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1	
					C836, 37	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C850	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1100, 01	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C851	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1103	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C852-55	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4		C1104	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C856	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1		C1105	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C857	ECUX1H070DCV	C. CAPACITOR CH 50V 7P	1		C1106	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C900	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1107, 08	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C901	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1109	ECEV1CN1000	E. CAPACITOR CH 16V 10U	1	
C902	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C1110	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C903	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1		C1111-13	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C904, 05	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2		C1114	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1	
C906	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1115-20	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C907	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1121	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C908	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1		C1122	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C909	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1		C1123	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C910, 11	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2		C1124-26	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C912	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1		C1127	ECUX1H681JV	C. CAPACITOR CH 50V 680P	1	
C913	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1		C1128	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	1	
C914-16	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3		C1129-31	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3	
C917	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1		C1150	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C918	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1151	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1	
C919	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1152	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C920	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1153	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C921	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1154	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C922	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1		C1155	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C923	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1156	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C924	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C1157, 58	ECEV1EV1000	E. CAPACITOR CH 25V 10U	2	
C925	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1159, 60	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2	
C926	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1161	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1	
C927	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1		C1162	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C928	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1163	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1	
C929	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1164	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C930	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1165	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C931	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1166, 67	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2	
C932	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1168	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C933	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C1169	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1	
C934, 35	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2		C1170-75	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	6	
C936	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1176	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C937	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C1177	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C938	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1178	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C939	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1		C1179	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C940	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1		C1180	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C941, 42	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2		C1181	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C943, 44	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2		C1182	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C945	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1		C1183	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C946	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1184	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C947	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1185	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1	
C948, 49	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2		C1186	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C1000	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1187-95	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	9	
C1001	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1196-03	ECEV1CV1000	E. CAPACITOR CH 16V 10U	8	
C1002	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1		C1204-11	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	8	
C1003	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1250-53	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C1004	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		C1254-57	ECEV1EV1000	E. CAPACITOR CH 25V 10U	4	
C1005	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1258-61	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C1006-12	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	7		C1262-65	ECEV1CV1000	E. CAPACITOR CH 16V 10U	4	
C1013	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1266-69	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4	
C1014	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1						
C1015-18	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4		D400	MA152K	DIODE	1	
C1019	ECEV1EN3R30	E. CAPACITOR CH 25V 3.3U	1		D500	MA152K	DIODE	1	
C1020	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		D501, 02	MA335-R	DIODE	2	
C1021	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		D503	MA152K	DIODE	1	
C1023	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		D900	MA142WK	DIODE	1	
C1024	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1		D901	MA152K	DIODE	1	
C1025-27	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	3		D1000	MA142K	DIODE	1	
C1028, 29	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2		D1001	MA335-R	DIODE	1	
C1030	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1		D1050	MA152K	DIODE	1	
C1031	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		D1100	MA142K	DIODE	1	
C1035	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1						
C1050	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		FL301	VLF1294	FILTER	1	
C1052	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		FL303	VLF1295	FILTER	1	
C1053-56	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	4		FL305	VLF1295	FILTER	1	
C1057	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		FL1150-53	VLF1016A223	FILTER	4	
C1058	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1						
C1059	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		IC150, 51	SN74S1051NS	IC	2	
C1060	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1		IC152	74ALS245ASJ	IC	1	
C1062	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		IC153, 54	74ALS541SJ	IC	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC156	VS12391B	IC	1		IC1167, 68	NJM79L09UA	IC	2	
IC157	SN74S1051NS	IC	1		L100-06	VLP0133	COIL	7	
IC158	MC74HC574AF	IC	1		L302, 03	VL00163J6R8	COIL	6.8UH	2
IC159	UPD71055GB	IC	1		L304	VL00163J120	COIL	12UH	1
IC160	MC74HC574AF	IC	1		L305, 06	VL00163J560	COIL	56UH	2
IC161	SN74S1051NS	IC	1		L307	VL00163J220	COIL	22UH	1
IC163	MC74HC74AF	IC	1		L400	VL00163J470	COIL	47UH	1
IC200, 01	MC74HC574AF	IC	2		L500-02	VL00163J220	COIL	22UH	3
IC202	MC74HC541AF	IC	1		L503	VL00163J270	COIL	27UH	1
IC203	TC7SH08FU	IC	1		L504	VL00163J820	COIL	82UH	1
IC250	XC62AP3002P	IC	1		L505, 06	VL00163J470	COIL	47UH	2
IC251	UPD65840G024	IC	1		L507	VL00163J270	COIL	27UH	1
IC254	74F244SJ	IC	1		L508	VL00163J6R8	COIL	6.8UH	1
IC256	74F244SJ	IC	1		L509	VL00163J470	COIL	47UH	1
IC300	NJM082BM	IC	1		L510	VL00163J5R6	COIL	5.6UH	1
IC301	NJM084M	IC	1		L800	VL00163J120	COIL	12UH	1
IC303	MC74HC244AF	IC	1		L801, 02	VL00163J220	COIL	22UH	2
IC306-08	MB40778PF	IC	3		L850	VL00163J180	COIL	18UH	1
IC309-11	EL4089CS	IC	3		L900	VL00163J101	COIL	100UH	1
IC312, 13	MC14053BF	IC	2		L901	VL00163J221	COIL	220UH	1
IC500	NJM082BM	IC	1		L902	VL00163J680	COIL	68UH	1
IC502	MC74HC4053F	IC	1		L903-08	VL00163J470	COIL	47UH	6
IC503	M51272FP	IC	1		L1000	VL00163J470	COIL	47UH	1
IC600	74ALS541SJ	IC	1		L1001	VL00163J221	COIL	220UH	1
IC601-03	MC10H124M	IC	3		L1002, 03	VL00163J220	COIL	22UH	2
IC700	VS12499C	IC	1		L1004	VL00163J470	COIL	47UH	1
IC702	74F244SJ	IC	1		L1100, 01	VL00163J220	COIL	22UH	2
IC800	EL4089CS	IC	1						
IC801	NJM082BM	IC	1		P1, P2	VJP3454B096	CONNECTOR (MALE)		2
IC802	NJM2534V	IC	1		P3	VJP1233T	CONNECTOR (MALE)	6P	1
IC805	AD828AR	IC	1						
IC850	NJM2534V	IC	1						
IC900	AN91A12S	IC	1		Q300-05	2SD601A-R	TRANSISTOR		6
IC902	NE521D-T	IC	1		Q306-14	2SB709A-R	TRANSISTOR		9
IC904	MC74HC04AF	IC	1		Q315-17	2SD601A-R	TRANSISTOR		3
IC908, 09	MM74HC221AM	IC	2		Q318, 19	2SB709A-R	TRANSISTOR		2
IC910	MC74HC125AF	IC	1		Q400	2SC2404-D	TRANSISTOR		1
IC913	NJM082BM	IC	1		Q401-03	2SB709A-R	TRANSISTOR		3
IC915	SN74LS221NS	IC	1		Q404, 05	2SD601A-R	TRANSISTOR		2
IC916	NJM082BM	IC	1		Q406, 07	2SB709A-R	TRANSISTOR		2
IC923-25	TC7SH00FU	IC	3		Q408-10	2SD601A-R	TRANSISTOR		3
IC1000	NE521D-T	IC	1		Q500	2SB709A-R	TRANSISTOR		1
IC1001	DAC10GS	IC	1		Q501, 02	2SC2295-C	TRANSISTOR		2
IC1002	MC14053BF	IC	1		Q503, 04	2SB709A-R	TRANSISTOR		2
IC1003	NJM082BM	IC	1		Q505	2SC2295-C	TRANSISTOR		1
IC1004	TC7SH08FU	IC	1		Q506, 07	2SB709A-R	TRANSISTOR		2
IC1005	NJM084M	IC	1		Q508	2SD601A-R	TRANSISTOR		1
IC1015	TC7SH00FU	IC	1		Q510	2SD601A-R	TRANSISTOR		1
IC1051	NJM082BM	IC	1		Q513	2SD601A-R	TRANSISTOR		1
IC1053	SN74AS74ANS	IC	1		Q800, 01	2SA1532-B	TRANSISTOR		2
IC1055, 56	SN74AS244AN	IC	2		Q802, 03	2SD601A-R	TRANSISTOR		2
IC1057	SN74AS74ANS	IC	1		Q804	2SB709A-R	TRANSISTOR		1
IC1100	NJM084M	IC	1		Q806, 07	2SB709A-R	TRANSISTOR		2
IC1102	DAC10GS	IC	1		Q850	2SA1532-B	TRANSISTOR		1
IC1103	SN74LS221NS	IC	1		Q851	2SB709A-R	TRANSISTOR		1
IC1106	UPD65650J203	IC	1		Q1000	2SB709A-R	TRANSISTOR		1
IC1107, 08	MC74HC04AF	IC	2		Q1001, 02	2SK608-R	TRANSISTOR		2
IC1113	MC74HC244AF	IC	1						
IC1114	MC74HC00AF	IC	1		QR200	UN2212	TRANSISTOR-RESISTOR		1
IC1115, 16	SN74LS221NS	IC	2		QR201	MUN2213	TRANSISTOR-RESISTOR		1
IC1150	NJM78L09UA	IC	1		QR202	MUN2112	TRANSISTOR-RESISTOR		1
IC1151	NJM78L05UA	IC	1		QR300	MUN2213	TRANSISTOR-RESISTOR		1
IC1152	NJM79L05UA	IC	1		QR301	MUN2112	TRANSISTOR-RESISTOR		1
IC1153	NJM78L09UA	IC	1		QR500, 01	MUN2213	TRANSISTOR-RESISTOR		2
IC1154	AN78N05	IC	1		QR801, 02	MUN2213	TRANSISTOR-RESISTOR		2
IC1155	NJM79L09UA	IC	1		QR803	MUN2112	TRANSISTOR-RESISTOR		1
IC1156	NJM78L09UA	IC	1						
IC1157	NJM78L05UA	IC	1		R151, 52	ERJ3GEYJ101	M.RESISTOR CH 1/16W	100	2
IC1158	NJM79L05UA	IC	1		R153, 54	ERJ3GEYG102	M.RESISTOR CH 1/16W	1K	2
IC1159	NJM79L09UA	IC	1		R155-65	ERJ3GEYJ103	M.RESISTOR CH 1/16W	10K	11
IC1160	AN78N09	IC	1		R166-69	ERJ3GEYG102	M.RESISTOR CH 1/16W	1K	4
IC1161	NJM78L05UA	IC	1		R170-80	ERJ3GEYJ103	M.RESISTOR CH 1/16W	10K	11
IC1162	NJM79L05UA	IC	1		R181, 82	ERJ3GEYG102	M.RESISTOR CH 1/16W	1K	2
IC1163	AN79N09	IC	1		R183-85	ERJ3GEYJ103	M.RESISTOR CH 1/16W	10K	3
IC1165, 66	NJM78L09UA	IC	2		R186	ERJ3GEY0R00	M.RESISTOR CH 1/16W	0	1

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R200-21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	22		R382	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R222	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R383	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R223, 24	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		R384	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R225-32	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	8		R385	ERJ6RBD752	M.RESISTOR CH 1/10W 7.5K	1	
R234	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R386-88	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3	
R239	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R391, 92	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R251	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R393, 94	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R252	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R400	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R253	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R401	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R254	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R402	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R255	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R403	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R258	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R404	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R260	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R405	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R262	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R406, 07	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R264	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R408	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R266-70	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5		R409	ERJ6RBD752	M.RESISTOR CH 1/10W 7.5K	1	
R273, 74	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		R410	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R276	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R411	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R302	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R412	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R303	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R413	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R304	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1		R414	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R305	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		R415, 16	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
R306	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R417, 18	ERJ6RBD221	M.RESISTOR CH 1/10W 220	2	
R307	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R419	ERJ6RBD271	M.RESISTOR CH 1/10W 270	1	
R308, 09	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2		R420	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1	
R310, 11	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2		R421	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R312	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R422	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1	
R313	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1		R423, 24	ERJ6RBD271	M.RESISTOR CH 1/10W 270	2	
R314	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R425	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R315, 16	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R426	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1	
R317	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R427	ERJ6RBD221	M.RESISTOR CH 1/10W 220	1	
R318	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R428	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	
R320	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R429	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R321	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R430	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R322	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R431	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R323, 24	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2		R432	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R326	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		R433	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R329-32	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	4		R434, 35	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R334	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R500	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R336	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1		R502, 03	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2	
R337	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R504	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R338	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R505	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R339	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R507	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R340	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R509	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1	
R341	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R510	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R342	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R511	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R343	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R512	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R344	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R513	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R345	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R514	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R347, 48	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2		R515	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R349	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R516	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R350	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		R517	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R351	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R518	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R352	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R519, 20	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R353	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R521	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R354	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		R522	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1	
R355	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R523	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1	
R356	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R524	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R357	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1		R525	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1W	1	
R358	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R526	ERJ3GEYJ394	M.RESISTOR CH 1/16W 390K	1	
R359	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1		R527	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R361	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R528	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R362	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R529	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R363	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R530	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R364	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R531	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R366	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R532-34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3	
R367	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R535, 36	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R368	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R537, 38	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	2	
R369	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R539	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R370	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R540, 41	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R372	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1		R542	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R374, 75	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2		R543	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R378	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R544, 45	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R379	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R546	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R380	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R547, 48	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R549	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R877	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R550	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R881	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R552	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R900	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R553	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R901	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
R559	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1		R902	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R560	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R903	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R561	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R904, 05	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R562	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R906, 07	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	2	
R565	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R908-10	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3	
R571	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1		R911	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1	
R572	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R912	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R573	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R913	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1	
R574	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R914	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R577	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R915	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R579	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R916	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R580	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R917	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R581	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1		R918	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R583	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R919	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R585	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R920	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R600	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R921, 22	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R601-10	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	10		R923	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R611-34	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	24		R924	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R635-58	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	24		R925, 26	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R700, 01	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R927	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R702	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R928	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1	
R704, 05	ERDS2TJ102	C.RESISTOR 1/4W 1K	2		R929	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R800	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1		R930	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R801	ERJ3GEYJ182	M.RESISTOR CH 1/16W 1.8K	1		R931	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R802	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1		R932	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R803	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R933	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R804	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		R934, 35	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R806	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R1000	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R810	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		R1001	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R812	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R1002	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R813, 14	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	2		R1003	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R815	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R1004	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
R816	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R1006, 07	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	2	
R817	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R1008	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R820	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R1009	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R821	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R1010	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R822	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R1011	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R823	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R1013	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R824	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1		R1014	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R825	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R1015	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R826	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R1016	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R828	VRE006610102	M.RESISTOR CH 1/10W 1K	1		R1018	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R829, 30	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2		R1019	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R831, 32	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2		R1020	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R833	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R1021	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R834	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1		R1022, 23	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2	
R835, 36	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	2		R1024	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R837	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		R1025	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R838-40	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	3		R1026	ERJ3GEYG822	M.RESISTOR CH 1/16W 8.2K	1	
R841	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R1027	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R842	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1		R1028	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R843	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1		R1030	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R844, 45	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2		R1036	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R849, 50	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2		R1050	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1	
R851	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R1051	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R852	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R1052	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R853	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R1053	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R854	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		R1054	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1	
R855, 56	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2		R1055	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1	
R857	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1		R1056	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R858, 59	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2		R1057	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R860	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1		R1058	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R861	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R1060	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R862	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		R1100	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1	
R863	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R1101	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R864	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		R1103	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R865	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R1104	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R866	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1		R1105	ERJ3GEYG682	M.RESISTOR CH 1/16W 6.8K	1	
R870, 71	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2		R1106	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R874	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R1107	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R876	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		R1108	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1109	ERJ3GEY6682	M.RESISTOR CH 1/16W 6.8K	1		■ E4	VEP83352B	F4 V OUT P.C.BOARD	1	(RTL)FOR AJ-D450E/D440E
R1110	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1						
R1112	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1						
R1113	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C100	ECEVICV4700	E.CAPACITOR CH 16V 47U	1	
R1115-17	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	3		C101	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1119	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C102	ECEVICV4700	E.CAPACITOR CH 16V 47U	1	
R1121	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C103	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1122	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		C150-60	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	11	
R1123	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1		C200-03	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	4	
R1124	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		C250, 51	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
R1125	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		C252	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
R1126	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		C253-57	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	5	
R1127	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1		C258	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
R1128	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	1		C261	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1129	ERJ3GEY6471	M.RESISTOR CH 1/16W 470	1		C263	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1135	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1		C265	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
R1136	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1		C267	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
					C300-02	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
SW400	VSS0372	SWITCH	1		C303	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C304	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
TG100	VJR0646	TEST POINT	1		C305	ECEVOJN1010	E.CAPACITOR CH 6.3V 100U	1	
TG901	VJR0646	TEST POINT	1		C306, 07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
TG1106	VJR0646	TEST POINT	1		C308	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C309, 10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
TH500	ERTD2FHL102S	THERMISTOR 1K	1		C311	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	1	
					C312	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
TP300	VJR0646	TEST POINT	1		C313	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	1	
TP903	VJR0646	TEST POINT	1		C314-16	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
TP905	VJR0646	TEST POINT	1		C317	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	1	
TP1001	VJR0646	TEST POINT	1		C318-23	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	6	
TP1100	VJR0646	TEST POINT	1		C324	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
TP1102-05	VJR0646	TEST POINT	4		C325, 26	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
					C328	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
VC1000	ECV12W20X53T	TRIMMER	1		C329, 30	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
					C332	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
VR300	EVMEGSA00B24	V.RESISTOR 20K	1		C333	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
VR301	EVMEGSA00B12	V.RESISTOR 100	1		C334, 35	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
VR302-04	EVMEGSA00B13	V.RESISTOR 1K	3		C336, 37	ECUX1H390JCV	C.CAPACITOR CH 50V 39P	2	
VR305, 06	EVMEGSA00B52	V.RESISTOR 500	2		C339	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
VR307	EVMEGSA00B13	V.RESISTOR 1K	1		C340	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
VR310	VRV0113B102	V.RESISTOR 1K	1		C343	ECUX1H680JCV	C.CAPACITOR CH 50V 68P	1	
VR400	EVMEGSA00B13	V.RESISTOR 1K	1		C344	ECUX1H151JCV	C.CAPACITOR CH 50V 150P	1	
VR500-02	EVMEGSA00B53	V.RESISTOR 5K	3		C346	ECUX1H020CCV	C.CAPACITOR CH 50V 2P	1	
VR503	EVMEGSA00B13	V.RESISTOR 1K	1		C347	ECUX1H121JCV	C.CAPACITOR CH 50V 120P	1	
VR505, 06	EVMEGSA00B23	V.RESISTOR 2K	2		C348, 49	ECEVICV1000	E.CAPACITOR CH 16V 10U	2	
VR507	EVMEGSA00B13	V.RESISTOR 1K	1		C350	ECUX1H560JCV	C.CAPACITOR CH 50V 56P	1	
VR508, 09	VRV0113B203	V.RESISTOR 20K	2		C351	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
VR800	EVMEGSA00B53	V.RESISTOR 5K	1		C352-66	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	15	
VR801	EVMEGSA00B13	V.RESISTOR 1K	1		C370, 71	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
VR802	EVMEGSA00B53	V.RESISTOR 5K	1		C372	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
VR803	EVMEGSA00B13	V.RESISTOR 1K	1		C373	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
VR804	VRV0113B203	V.RESISTOR 20K	1		C374	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
VR805	VRV0113B204	V.RESISTOR 200K	1		C375	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
VR900	EVMEGSA00B54	V.RESISTOR 50K	1		C376	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
VR901	EVMEGSA00B14	V.RESISTOR 10K	1		C377	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
VR902	EVMEGSA00B53	V.RESISTOR 5K	1		C378	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
VR1000	EVMEGSA00B24	V.RESISTOR 20K	1		C400	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
VR1050	EVMEGSA00B53	V.RESISTOR 5K	1		C401	ECUX1H470JCV	C.CAPACITOR CH 50V 47P	1	
VR1100	EVMEGSA00B53	V.RESISTOR 5K	1		C402-04	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	3	
VR1102	EVMEGSA00B53	V.RESISTOR 5K	1		C405	ECUX1H330JCV	C.CAPACITOR CH 50V 33P	1	
					C406	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
X900	VXS0338	CRYSTAL OSCILLATOR	1		C407	ECUX1H271JCV	C.CAPACITOR CH 50V 270P	1	
X901	VXS0567A	CRYSTAL OSCILLATOR	1		C409, 10	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
X1000	VXS0081	CRYSTAL OSCILLATOR	1		C412, 13	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
X1050	VXS0788	CRYSTAL OSCILLATOR	1		C415	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
		MISCELLANEOUS			C425	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C500	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
					C501	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C502	ECUX1H221JCV	C.CAPACITOR CH 50V 220P	1	
	VML2143	CARD PULLER	1		C503	ECUX1H821JV	C.CAPACITOR CH 50V 820P	1	
	VML2144	CARD PULLER	1		C504	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	
					C505	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C506, 07	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	2	
					C508	ECEVICV1000	E.CAPACITOR CH 16V 10U	1	
					C509	ECUX1E104ZFV	C.CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C510, 11	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2		C901	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C512	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C902	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C513-15	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C903	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C516	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C904, 05	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	2	
C517	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C906	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C518	ECUX1H1000CV	C. CAPACITOR CH 50V 10P	1		C907	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C519-21	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C908	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C522	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C909	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C523-25	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		C910, 11	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C526	ECUX1H271JCV	C. CAPACITOR CH 50V 270P	1		C912	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1	
C527	ECUX1H151JCV	C. CAPACITOR CH 50V 150P	1		C913	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1	
C528	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C914-16	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3	
C529	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1		C917	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C530-33	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C918	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C534	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1		C919	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C535-38	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C920	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C539	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C921	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C540, 41	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C922	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1	
C542	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C923	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1	
C543	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C924	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C544	ECUX1H120JCV	C. CAPACITOR CH 50V 12P	1		C925	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C545	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		C926	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C546	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1		C927	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1	
C548	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		C928	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C550	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1		C929	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C551	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1		C930	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C552	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C931	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C553	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C932	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C554	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1		C933	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C555	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C934, 35	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C556	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C936	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C557	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C937	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C558	ECUX1C473KBV	C. CAPACITOR CH 16V 0.047U	1		C938	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C559, 60	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C939	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1	
C561, 62	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	2		C940	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C563, 64	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C941, 42	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C565	ECUX1H1000CV	C. CAPACITOR CH 50V 10P	1		C945	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1	
C566	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C946	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C567	ECUX1H330JCV	C. CAPACITOR CH 50V 33P	1		C947	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C568, 69	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C948, 49	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C570	ECEV0JV4700	E. CAPACITOR CH 6.3V 47U	1		C1000	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C571	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C1001	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C572	ECEV0JV4700	E. CAPACITOR CH 6.3V 47U	1		C1002	ECUX1H820JCV	C. CAPACITOR CH 50V 82P	1	
C573-76	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C1003	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C600-06	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	7		C1004	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C700-03	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C1005	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C705	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C1006-12	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	7	
C800, 01	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2		C1013	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C802	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1014	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C803, 04	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C1015-18	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C805	ECUX1H0200CV	C. CAPACITOR CH 50V 2P	1		C1019	ECEV1EN3R30	E. CAPACITOR CH 25V 3.3U	1	
C806	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1		C1020	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C807	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1021	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C808, 09	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		C1023	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C810	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		C1024	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C811-14	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C1025-27	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3	
C815	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1028, 29	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	2	
C816	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C1030	ECUX1H680JCV	C. CAPACITOR CH 50V 68P	1	
C818	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C1031	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C819	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1035	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C821	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1050	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C822	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1052	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C824	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		C1053-56	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4	
C826	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1057	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1	
C827	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1058	ECEV1HN0100	E. CAPACITOR CH 50V 1U	1	
C828	ECUX1H0200CV	C. CAPACITOR CH 50V 2P	1		C1059	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C829-32	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C1060	ECUX1H102JV	C. CAPACITOR CH 50V 1000P	1	
C833	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		C1062	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C834	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	1		C1100, 01	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C850	ECUX1H470JCV	C. CAPACITOR CH 50V 47P	1		C1103	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C851	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1		C1104	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C852-55	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	4		C1105	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1	
C856	ECUX1H390JCV	C. CAPACITOR CH 50V 39P	1		C1106	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C857	ECUX1H0700CV	C. CAPACITOR CH 50V 7P	1		C1107, 08	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2	
C900	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		C1109	ECEV1CN1000	E. CAPACITOR CH 16V 10U	1	

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Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C1110	ECUX1H681JV	C. CAPACITOR CH 50V 680P	1		IC202	MC74HC541AF	IC	1	
C1111-13	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		IC203	TC7SH08FU	IC	1	
C1114	ECUX1H101JCV	C. CAPACITOR CH 50V 15P	1		IC250	XC62AP3002P	IC	1	
C1115-20	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	6		IC251	UPD65840G024	IC	1	
C1121	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC254	74F244SJ	IC	1	
C1122	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC256	74F244SJ	IC	1	
C1123	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	1		IC300	NJM082BM	IC	1	
C1124-26	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		IC301	NJM084M	IC	1	
C1127, 28	ECUX1H471JCV	C. CAPACITOR CH 50V 470P	2		IC303	MC74HC244AF	IC	1	
C1129-31	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	3		IC306-08	MB40778PF	IC	3	
C1150	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC309-11	EL4089CS	IC	3	
C1151	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1		IC312, 13	MC14053BF	IC	2	
C1152	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC500	NJM082BM	IC	1	
C1153	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC502	MC74HC4053F	IC	1	
C1154	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC503	M51272FP	IC	1	
C1155	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC600	74ALS541SJ	IC	1	
C1156	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC601-03	MC10H124M	IC	3	
C1157, 58	ECEV1EV1000	E. CAPACITOR CH 25V 10U	2		IC700	VS12500C	IC	1	
C1159, 60	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2		IC702	74F244SJ	IC	1	
C1161	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1		IC800	EL4089CS	IC	1	
C1162	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC801	NJM082BM	IC	1	
C1163	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1		IC802	NJM2534V	IC	1	
C1164	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC805	AD828AR	IC	1	
C1165	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC850	NJM2534V	IC	1	
C1166, 67	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	2		IC900	AN91A12S	IC	1	
C1168	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC902	NE521D	IC	1	
C1169	ECEV1EV1000	E. CAPACITOR CH 25V 10U	1		IC904	MC74HC04AF	IC	1	
C1170-75	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	6		IC908, 09	MM74HC221AM	IC	2	
C1176	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC910	MC74HC125AF	IC	1	
C1177	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC913	NJM082BM	IC	1	
C1178	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC915	SN74LS221NS	IC	1	
C1179	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC916	NJM082BM	IC	1	
C1180	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC923-25	TC7SH00FU	IC	3	
C1181	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC1000	NE521D	IC	1	
C1182	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC1001	DAC10GS	IC	1	
C1183	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC1002	MC14053BF	IC	1	
C1184	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC1003	NJM082BM	IC	1	
C1185	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	1		IC1004	TC7SH08FU	IC	1	
C1186	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC1005	NJM084M	IC	1	
C1187-95	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	9		IC1015	TC7SH00FU	IC	1	
C1196-03	ECEV1CV1000	E. CAPACITOR CH 16V 10U	8		IC1051	NJM082BM	IC	1	
C1204-11	ECUX1E104ZV	C. CAPACITOR CH 25V 0.1U	8		IC1053	SN74AS74ANS	IC	1	
C1250-53	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4		IC1055, 56	SN74AS244AN	IC	2	
C1254-57	ECEV1EV1000	E. CAPACITOR CH 25V 10U	4		IC1057	SN74AS74ANS	IC	1	
C1258-61	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4		IC1100	NJM084M	IC	1	
C1262-65	ECEV1CV1000	E. CAPACITOR CH 16V 10U	4		IC1102	DAC10GS	IC	1	
C1266-69	ECUX1C104KBV	C. CAPACITOR CH 16V 0.1U	4		IC1103	SN74LS221NS	IC	1	
					IC1106	UPD65650J203	IC	1	
D400	MA152K	DIODE	1		IC1107, 08	MC74HC04AF	IC	2	
D500	MA152K	DIODE	1		IC1113	MC74HC244AF	IC	1	
D501, 02	MA335-R	DIODE	2		IC1114	MC74HC00AF	IC	1	
D503	MA152K	DIODE	1		IC1115, 16	SN74LS221NS	IC	2	
D900	MA142WK	DIODE	1		IC1150	NJM78L09UA	IC	1	
D901	MA152K	DIODE	1		IC1151	NJM78L05UA	IC	1	
D1000	MA142K	DIODE	1		IC1152	NJM79L05UA	IC	1	
D1001	MA335-R	DIODE	1		IC1153	NJM78L09UA	IC	1	
D1050	MA152K	DIODE	1		IC1154	AN78N05	IC	1	
D1100	MA142K	DIODE	1		IC1155	NJM79L09UA	IC	1	
					IC1156	NJM78L09UA	IC	1	
FL301	VLF1294	FILTER	1		IC1157	NJM78L05UA	IC	1	
FL303	VLF1295	FILTER	1		IC1158	NJM79L05UA	IC	1	
FL305	VLF1295	FILTER	1		IC1159	NJM79L09UA	IC	1	
FL1150-53	VLF1016A223	FILTER	4		IC1160	AN78N09	IC	1	
					IC1161	NJM78L05UA	IC	1	
IC150, 51	SN74S1051NS	IC	2		IC1162	NJM79L05UA	IC	1	
IC152	74ALS245ASJ	IC	1		IC1163	AN79N09	IC	1	
IC153, 54	74ALS541SJ	IC	2		IC1165, 66	NJM78L09UA	IC	2	
IC156	VS12391B	IC	1		IC1167, 68	NJM79L09UA	IC	2	
IC157	SN74S1051NS	IC	1						
IC158	MC74HC574AF	IC	1		L100-06	VLP0133	COIL	7	
IC159	UPD71055GB	IC	1		L302, 03	VL00163J6R8	COIL	6.8UH	2
IC160	MC74HC574AF	IC	1		L304	VL00163J120	COIL	12UH	1
IC161	SN74S1051NS	IC	1		L305, 06	VL00163J560	COIL	56UH	2
IC163	MC74HC74AF	IC	1		L307	VL00163J220	COIL	22UH	1
IC200, 01	MC74HC574AF	IC	2		L400	VL00163J101	COIL	100UH	1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
L500-02	VL00163J220	COIL 22UH	3		R253	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
L503	VL00163J270	COIL 27UH	1		R254	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
L504	VL00163J820	COIL 82UH	1		R255	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L505, 06	VL00163J470	COIL 47UH	2		R258	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L507	VL00163J150	COIL 15UH	1		R260	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
L508	VL00163J5R6	COIL 5.6UH	1		R262, 63	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
L509	VL00163J470	COIL 47UH	1		R266-70	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	5	
L510	VL00163J6R8	COIL 6.8UH	1		R273, 74	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
L800	VL00163J150	COIL 15UH	1		R276	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L801, 02	VL00163J220	COIL 22UH	2		R302	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
L850	VL00163J180	COIL 18UH	1		R303	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
L900	VL00163J101	COIL 100UH	1		R304	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
L901	VL00163J221	COIL 220UH	1		R305	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
L902	VL00163J390	COIL 39UH	1		R306	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
L903-08	VL00163J470	COIL 47UH	6		R307	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
L1000	VL00163J470	COIL 47UH	1		R308, 09	ERJ3RBD472	M.RESISTOR CH 1/16W 4.7K	2	
L1001	VL00163J221	COIL 220UH	1		R310, 11	ERJ3RBD103	M.RESISTOR CH 1/16W 10K	2	
L1002, 03	VL00163J220	COIL 22UH	2		R312	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
L1004	VL00163J470	COIL 47UH	1		R313	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
L1100, 01	VL00163J220	COIL 22UH	2		R314	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
					R315, 16	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R317	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
P3	VJP1233T	CONNECTOR (MALE) 6P	1		R318	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
					R320	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
Q300-05	2SD601A-R	TRANSISTOR	6		R321	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
Q306-14	2SB709A-R	TRANSISTOR	9		R322	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
Q315-17	2SD601A-R	TRANSISTOR	3		R323, 24	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	2	
Q318, 19	2SB709A-R	TRANSISTOR	2		R326	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1	
Q400	2SC2404-D	TRANSISTOR	1		R329-32	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	4	
Q401-03	2SB709A-R	TRANSISTOR	3		R334	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
Q404, 05	2SD601A-R	TRANSISTOR	2		R336	ERJ3GEYJ331	M.RESISTOR CH 1/16W 330	1	
Q406, 07	2SB709A-R	TRANSISTOR	2		R337	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
Q408-10	2SD601A-R	TRANSISTOR	3		R338	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q500	2SB709A-R	TRANSISTOR	1		R339	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
Q501, 02	2SC2295-C	TRANSISTOR	2		R340	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q503, 04	2SB709A-R	TRANSISTOR	2		R341	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
Q505	2SC2295-C	TRANSISTOR	1		R342	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q506, 07	2SB709A-R	TRANSISTOR	2		R343	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
Q508	2SD601A-R	TRANSISTOR	1		R344	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q509	XN6501	TRANSISTOR-RESISTOR	1		R345	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
Q510	2SD601A-R	TRANSISTOR	1		R347, 48	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2	
Q511, 12	2SC2295-C	TRANSISTOR	2		R349	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q513	2SD601A-R	TRANSISTOR	1		R350	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
Q514	2SB709A-R	TRANSISTOR	1		R351-53	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	3	
Q800, 01	2SA1532-B	TRANSISTOR	2		R354	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
Q802, 03	2SD601A-R	TRANSISTOR	2		R355, 56	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2	
Q804	2SB709A-R	TRANSISTOR	1		R357	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
Q806, 07	2SB709A-R	TRANSISTOR	2		R358	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
Q850	2SA1532-B	TRANSISTOR	1		R359	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
Q851	2SB709A-R	TRANSISTOR	1		R361	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
Q1000	2SB709A-R	TRANSISTOR	1		R362	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
Q1001, 02	2SK608-R	TRANSISTOR	2		R363	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
					R364	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
QR200	UN2212	TRANSISTOR-RESISTOR	1		R366	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
QR201	MUN2213	TRANSISTOR-RESISTOR	1		R367	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
QR202	MUN2112	TRANSISTOR-RESISTOR	1		R368	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
QR300	MUN2213	TRANSISTOR-RESISTOR	1		R369	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
QR301	MUN2112	TRANSISTOR-RESISTOR	1		R370	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	
					R372	ERJ3GEYJ121	M.RESISTOR CH 1/16W 120	1	
R151, 52	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		R374, 75	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R153, 54	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2		R378	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R155-65	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11		R379	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R166-69	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	4		R380	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R170-80	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	11		R382	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R181, 82	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	2		R383	ERJ3GEYJ152	M.RESISTOR CH 1/16W 1.5K	1	
R183-85	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	3		R384	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R186	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R385	ERJ6RBD752	M.RESISTOR CH 1/10W 7.5K	1	
R200-21	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	22		R386-88	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3	
R222	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1		R391, 92	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	
R223, 24	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	2		R393, 94	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	2	
R225-32	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	8		R400	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R234	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R401	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R239	ERJ3GEYOR00	M.RESISTOR CH 1/16W 0	1		R402	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R250	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R403	ERJ6RBD151	M.RESISTOR CH 1/10W 150	1	
R252	ERJ3GEYJ680	M.RESISTOR CH 1/16W 68	1		R404	ERJ3GEYJ102	M.RESISTOR CH 1/16W 1K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R405	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	1		R565	ERJ3GEY6332	M.RESISTOR CH 1/16W 3.3K	1	
R406, 07	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2		R566	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R408	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R567, 68	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	2	
R409	ERJ6RBD752	M.RESISTOR CH 1/10W 7.5K	1		R569, 70	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	2	
R410	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R571	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1	
R411	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R572	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R412	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R573	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1	
R413	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R574	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R414	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R575	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1	
R415, 16	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	2		R576	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R417, 18	ERJ6RBD221	M.RESISTOR CH 1/10W 220	2		R577	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R419	ERJ6RBD271	M.RESISTOR CH 1/10W 270	1		R578	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R420	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1		R579	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R421	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R580	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R422	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1		R581	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1	
R423, 24	ERJ6RBD271	M.RESISTOR CH 1/10W 270	2		R600	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R425	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R601-10	ERJ3GEYJ560	M.RESISTOR CH 1/16W 56	10	
R426	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1		R611-34	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	24	
R427	ERJ6RBD221	M.RESISTOR CH 1/10W 220	1		R635-58	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	24	
R428	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1		R700, 01	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2	
R429	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R702	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R430	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R704, 05	ERDS2TJ102	C.RESISTOR 1/4W 1K	2	
R431	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R800	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R432	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R801	ERJ3GEYJ271	M.RESISTOR CH 1/16W 270	1	
R433	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R802	ERJ3GEYJ151	M.RESISTOR CH 1/16W 150	1	
R434, 35	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2		R803	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1	
R500	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1		R804	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1	
R502, 03	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	2		R806	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R504	ERJ3GEYG471	M.RESISTOR CH 1/16W 470	1		R810	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R505	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		R812	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R506	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R813, 14	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	2	
R507	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R815	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R509	ERJ3GEYJ393	M.RESISTOR CH 1/16W 39K	1		R816	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R510	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R817	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R511	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R820	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R513	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R821	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1	
R514	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R822	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R515	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R823	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R516	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1		R824	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	1	
R517	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R825	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R518	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R826	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R519, 20	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R828	VPE006610102	M.RESISTOR CH 1/10W 1K	1	
R521	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R829, 30	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2	
R522	ERJ3GEYJ330	M.RESISTOR CH 1/16W 33	1		R831, 32	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R523	ERJ3GEYJ823	M.RESISTOR CH 1/16W 82K	1		R833	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R524	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R834-36	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	3	
R525	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		R837	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1	
R526	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1		R838-40	ERJ3RBD152	M.RESISTOR CH 1/16W 1.5K	3	
R527	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R841	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1	
R528	ERJ3GEYG332	M.RESISTOR CH 1/16W 3.3K	1		R842	ERJ3GEYJ124	M.RESISTOR CH 1/16W 120K	1	
R529	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1		R843	ERJ3RBD181	M.RESISTOR CH 1/16W 180	1	
R530	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		R844, 45	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	2	
R531	ERJ3GEYG472	M.RESISTOR CH 1/16W 4.7K	1		R849, 50	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R532-34	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	3		R851	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R535, 36	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2		R852	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1	
R537, 38	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	2		R853	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R539	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	1		R854	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R540, 41	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	2		R855, 56	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	2	
R542	ERJ3GEYJ100	M.RESISTOR CH 1/16W 10	1		R857	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1	
R543	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R858, 59	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	2	
R544, 45	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2		R860	ERJ3GEYJ220	M.RESISTOR CH 1/16W 22	1	
R546	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		R861	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1	
R547, 48	ERJ3GEYG152	M.RESISTOR CH 1/16W 1.5K	2		R862	ERJ3GEYJ821	M.RESISTOR CH 1/16W 820	1	
R549	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R863	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1	
R550	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R864	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1	
R551	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R865	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R554	ERJ3GEYJ391	M.RESISTOR CH 1/16W 390	1		R866	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1	
R555	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		R870	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R556, 57	ERJ3GEYJ181	M.RESISTOR CH 1/16W 180	2		R871	ERJ3GEYJ123	M.RESISTOR CH 1/16W 12K	1	
R558	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R881	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1	
R559	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1		R900	ERJ3GEYJ224	M.RESISTOR CH 1/16W 220K	1	
R560	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R901	ERJ3GEYJ684	M.RESISTOR CH 1/16W 680K	1	
R561	ERJ3GEYJ470	M.RESISTOR CH 1/16W 47	1		R902	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R563	ERJ3GEYG102	M.RESISTOR CH 1/16W 1K	1		R903	ERJ3GEYJ221	M.RESISTOR CH 1/16W 220	1	
R564	ERJ3GEYJ681	M.RESISTOR CH 1/16W 680	1		R904, 05	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R906, 07	ERJ3GEY6822	M.RESISTOR CH 1/16W 8.2K	2		R1124	ERJ3GEY682	M.RESISTOR CH 1/16W 6.8K	1	
R908-10	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	3		R1125	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1	
R911	ERJ3GEYJ184	M.RESISTOR CH 1/16W 180K	1		R1126	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1	
R912	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		R1127	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1	
R913	ERJ3GEYJ683	M.RESISTOR CH 1/16W 68K	1		R1128	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	1	
R914	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1		R1129	ERJ3GEY6471	M.RESISTOR CH 1/16W 470	1	
R915	ERJ3GEY6822	M.RESISTOR CH 1/16W 8.2K	1		R1136	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1	
R916	ERJ3GEY682	M.RESISTOR CH 1/16W 6.8K	1						
R917	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		TG100	VJR0646	TEST POINT	1	
R918	ERJ3GEY6471	M.RESISTOR CH 1/16W 470	1		TG901	VJR0646	TEST POINT	1	
R919	ERJ3GEYJ272	M.RESISTOR CH 1/16W 2.7K	1		TG1106	VJR0646	TEST POINT	1	
R920	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1						
R921, 22	ERJ3RBD102	M.RESISTOR CH 1/16W 1K	2		TH500	ERTD2FHL102S	THERMISTOR 1K	1	
R923	ERJ3GEY6332	M.RESISTOR CH 1/16W 3.3K	1						
R924	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		TP300	VJR0646	TEST POINT	1	
R925, 26	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	2		TP903	VJR0646	TEST POINT	1	
R927	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		TP905	VJR0646	TEST POINT	1	
R928	ERJ3GEYJ122	M.RESISTOR CH 1/16W 1.2K	1		TP1001	VJR0646	TEST POINT	1	
R929	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		TP1100	VJR0646	TEST POINT	1	
R930	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	1		TP1102-05	VJR0646	TEST POINT	4	
R931	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1						
R932	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		VC500	ECV1ZW30X53	TRIMMER	1	
R933	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		VC1000	ECV1ZW20X53T	TRIMMER	1	
R934, 35	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	2						
R950	EPDS2TJ273	C.RESISTOR 1/4W 27K	1		VR300	EVMEGSA00B24	V.RESISTOR 20K	1	
R1000	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		VR301	EVMEGSA00B12	V.RESISTOR 100	1	
R1001	ERJ3GEY6152	M.RESISTOR CH 1/16W 1.5K	1		VR302-04	EVMEGSA00B13	V.RESISTOR 1K	3	
R1002	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		VR305, 06	EVMEGSA00B52	V.RESISTOR 500	2	
R1003	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		VR307	EVMEGSA00B13	V.RESISTOR 1K	1	
R1005	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		VR310	VRV0113B102	V.RESISTOR 1K	1	
R1006, 07	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	2		VR400	EVMEGSA00B13	V.RESISTOR 1K	1	
R1008	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1		VR500-02	EVMEGSA00B53	V.RESISTOR 5K	3	
R1009	ERJ3GEYJ273	M.RESISTOR CH 1/16W 27K	1		VR503, 04	EVMEGSA00B13	V.RESISTOR 1K	2	
R1010	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		VR505, 06	EVMEGSA00B23	V.RESISTOR 2K	2	
R1011	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		VR507	EVMEGSA00B13	V.RESISTOR 1K	1	
R1013	ERJ3GEYJ223	M.RESISTOR CH 1/16W 22K	1		VR800	EVMEGSA00B53	V.RESISTOR 5K	1	
R1014	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1		VR801	EVMEGSA00B13	V.RESISTOR 1K	1	
R1015	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		VR802	EVMEGSA00B53	V.RESISTOR 5K	1	
R1016	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		VR803	EVMEGSA00B13	V.RESISTOR 1K	1	
R1018	ERJ3GEY6822	M.RESISTOR CH 1/16W 8.2K	1		VR900	EVMEGSA00B24	V.RESISTOR 20K	1	
R1019	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	1		VR901	EVMEGSA00B14	V.RESISTOR 10K	1	
R1020	ERJ3GEYJ153	M.RESISTOR CH 1/16W 15K	1		VR902	EVMEGSA00B53	V.RESISTOR 5K	1	
R1021	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		VR1000	EVMEGSA00B24	V.RESISTOR 20K	1	
R1022, 23	ERJ3GEYJ473	M.RESISTOR CH 1/16W 47K	2		VR1050	EVMEGSA00B53	V.RESISTOR 5K	1	
R1024	ERJ3GEY6332	M.RESISTOR CH 1/16W 3.3K	1		VR1100	EVMEGSA00B53	V.RESISTOR 5K	1	
R1025	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		VR1102	EVMEGSA00B53	V.RESISTOR 5K	1	
R1026	ERJ3GEY6822	M.RESISTOR CH 1/16W 8.2K	1						
R1027	ERJ3GEY6332	M.RESISTOR CH 1/16W 3.3K	1		X900	VXS0270	CRYSTAL OSCILLATOR	1	
R1028	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		X901	VXS0567A	CRYSTAL OSCILLATOR	1	
R1030	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1		X1000	VXS0363	CRYSTAL OSCILLATOR	1	
R1036	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1		X1050	VXS0788	CRYSTAL OSCILLATOR	1	
R1050	ERJ3GEY6471	M.RESISTOR CH 1/16W 470	1						
R1051	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1						
R1052	ERJ3GEYJ333	M.RESISTOR CH 1/16W 33K	1						
R1053	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		VML2143	CARD PULLER	1		
R1054	ERJ3GEYJ103	M.RESISTOR CH 1/16W 10K	1		VML2144	CARD PULLER	1		
R1055	ERJ3GEYJ105	M.RESISTOR CH 1/16W 1M	1						
R1056	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R1057	ERJ3GEY6102	M.RESISTOR CH 1/16W 1K	1						
R1058	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R1060	ERJ3GEYJ101	M.RESISTOR CH 1/16W 100	1						
R1100	ERJ3GEYJ562	M.RESISTOR CH 1/16W 5.6K	1						
R1101	ERJ3GEYJ183	M.RESISTOR CH 1/16W 18K	1		■ E5	VEP83353D	F5 REC PB P.C.BOARD	1	(RTL)FOR AJ-D450P/D440P
R1103	ERJ3GEY6332	M.RESISTOR CH 1/16W 3.3K	1						
R1104	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		C3101-08	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
R1105, 06	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	2		C3121	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
R1107	ERJ3GEY6152	M.RESISTOR CH 1/16W 1.5K	1		C3122	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
R1108	ERJ3GEY6472	M.RESISTOR CH 1/16W 4.7K	1		C3123	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
R1109	ERJ3GEY682	M.RESISTOR CH 1/16W 6.8K	1		C3124	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1	
R1110	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		C3125, 26	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
R1112	ERJ3GEYJ563	M.RESISTOR CH 1/16W 56K	1		C3127	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1	
R1115	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	1		C3128	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
R1119, 20	ERJ3GEY0R00	M.RESISTOR CH 1/16W 0	2		C3129	ECEV1EN3R30	E.CAPACITOR CH 25V 3.3U	1	
R1122	ERJ3GEYJ104	M.RESISTOR CH 1/16W 100K	1		C3130	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1	
R1123	ERJ3GEYJ222	M.RESISTOR CH 1/16W 2.2K	1		C3131	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C3132	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3514	ECUM1E150JCN	C. CAPACITOR CH 50V 15P	1	
C3134	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		C3515, 16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3135	ECUV1H151JCN	C. CAPACITOR CH 50V 150U	1		C3520	ECEVOJV4700	E. CAPACITOR CH6.3V 47U	1	
C3136	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		C3521, 22	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3137, 38	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2		C3523-25	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	3	
C3139, 40	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		C3601	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3141	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		C3602	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C3142	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C3605	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C3145	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		C3701, 02	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3146, 47	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		C3703	ECEVICV1000	E. CAPACITOR CH 16V 10U	1	
C3148	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		C3704, 05	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3149	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		C3706	ECEVICV1000	E. CAPACITOR CH 16V 10U	1	
C3150	ECEVIEN3R30	E. CAPACITOR CH 25V 3.3U	1		C3707, 08	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3151	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3709	ECEVICV1000	E. CAPACITOR CH 16V 10U	1	
C3152	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		C3710, 11	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3153-62	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	10		C3712	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3171-84	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	14		C3713, 14	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3185	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3715	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3191-15	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	25		C3716, 17	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3216	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3718	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3221-28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8		C3719, 20	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3229	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3721	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3241	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C3722, 23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3242-49	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8		C3724	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3250	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3725, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3261	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		C3727	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3262	ECUM1H100DCN	C. CAPACITOR CH 50V 10P	1		C3731-33	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	3	
C3263	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3741, 42	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3264	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1		C3743	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3265-68	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		C3744, 45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C3269	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		C3746	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1	
C3281-89	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	9		C6001	VCK0134K104	C. CAPACITOR 50V 0.1U	1	
C3292, 93	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2						
C3301-18	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	18		D3101	MA715	DIODE	1	
C3319	VCK0151	C. CAPACITOR	1		D3102	MA335-R	DIODE	1	
C3320	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1		D3103, 04	MA152K	DIODE	2	
C3321	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		D3111, 12	MA701A	DIODE	2	
C3322	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1		D3501-03	MA715	DIODE	3	
C3323	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		D3507, 08	MA152K	DIODE	2	
C3324	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1						
C3325	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		FL3101	VLF1116	FILTER	1	
C3326	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1		FL3102	VLF1117	FILTER	1	
C3327, 28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		FL3103	VLF1118	FILTER	1	
C3329	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		FL3104-06	VLF1016A223	FILTER	3	
C3330	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1						
C3331	ECEVICV1000	E. CAPACITOR CH 16V 10U	1		IC3001	UPD65841G025	IC	1	
C3332	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1		IC3003	MN67372A2	IC	1	
C3333	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC3004	MN4706F	IC	1	
C3334	ECEVOJV3300	E. CAPACITOR CH6.3V 33U	1		IC3005	MN673711	IC	1	
C3335	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1		IC3006	M65401FP	IC	1	
C3336	ECUV1H682KBN	C. CAPACITOR CH 50V 6800P	1		IC3007	L7A1433	IC	1	
C3337	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		IC3008	MB81V4260S7	IC	1	
C3341-53	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	13		IC3009, 10	L7A1434	IC	2	
C3354	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		IC3011	L7A1433	IC	1	
C3361, 62	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC3012	MB81V4260S7	IC	1	
C3367-70	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC3013	MN673711	IC	1	
C3381-92	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12		IC3014	M65401FP	IC	1	
C3421-32	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12		IC3015	M52660FP	IC	1	
C3441	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		IC3016	MN67372A2	IC	1	
C3442-45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC3017	MN4706F	IC	1	
C3451-58	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8		IC3018-21	UPD42280G3	IC	4	
C3459	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC3022	UPD65843G026	IC	1	
C3460, 61	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC3023	UPD42280G3	IC	1	
C3471-77	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	7		IC3024	UPD65868D022	IC	1	
C3478	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1		IC3025	UPD71055GB	IC	1	
C3485, 86	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC3028	UPD42280G3	IC	1	
C3491-95	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5		IC3030	UPD71055GB	IC	1	
C3501	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC3031	T160G41-1437	IC	1	
C3502-04	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		IC3101, 02	TCVHC257F	IC	2	
C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC3103, 04	T74VHC1244F	IC	2	
C3509	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC3105	MC74HC125AF	IC	1	
C3510	ECEVICV4700	E. CAPACITOR CH 16V 47U	1		IC3107	TC7S66F	IC	1	
C3511	ECEVOJV4700	E. CAPACITOR CH6.3V 47U	1		IC3108, 09	N.M082BM	IC	2	
C3512	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC3110	TC7S04F	IC	1	
C3513	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1		IC3111, 12	74F244SJ	IC	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC3113	T74LCX244F	IC	1		R3122	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
IC3114	MC10H124M	IC	1		R3123, 24	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
IC3115-17	T74LCX244F	IC	3		R3125-30	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	6	
IC3118-20	T74VHC244F	IC	3		R3132	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
IC3121	MC10H125M	IC	1		R3141, 42	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
IC3122	T74LCX244F	IC	1		R3143	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
IC3123-26	T74VHC245F	IC	4		R3145	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
IC3127	TC7S66F	IC	1		R3146, 47	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC3128	T74VHCT244F	IC	1		R3148	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
IC3129	MC10H124M	IC	1		R3149	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
IC3130	TC7S66F	IC	1		R3150	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
IC3131	T74VHC08F	IC	1		R3152, 53	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC3132	TCVHC257F	IC	1		R3154	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
IC3133	T74VHCT244F	IC	1		R3155	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
IC3134-36	T74VHC244F	IC	3		R3156	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
IC3141-44	74ALS541SJ	IC	4		R3157	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC3145	MC10H125M	IC	1		R3158	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
IC3146, 47	T74LCX244F	IC	2		R3159	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
IC3148	T74VHC74F	IC	1		R3160	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
IC3149, 50	SN74S1051NS	IC	2		R3161	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
IC3151, 52	74ALS541SJ	IC	2		R3162, 63	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
IC3153	74ALS245ASJ	IC	1		R3164	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
IC3154	74AC139SJ	IC	1		R3165	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
IC3156	T74VHC244F	IC	1		R3166	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
IC3157	TC7S04F	IC	1		R3167	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3158	T74VHC244F	IC	1		R3168, 69	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
IC3159-61	TCVHC257F	IC	3		R3171-75	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	5	
IC3162	T74VHC74F	IC	1		R3176	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3163, 64	T74VHCT244F	IC	2		R3177-79	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	3	
IC3165, 66	T74VHC245F	IC	2		R3181, 82	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
IC3167, 68	T74VHC244F	IC	2		R3185-88	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
IC3169	TC7S04F	IC	1		R3189-92	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	4	
IC3201	NUM78L09UA	IC	1		R3193	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3202	NUM79L09UA	IC	1		R3195-01	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	7	
IC3203	NUM78L05UA	IC	1		R3202	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3204	XC62AS0CXIP	IC	1		R3203-06	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	4	
IC3205	XC62AP3202P	IC	1		R3211	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3206	XC62AP2302P	IC	1		R3212-19	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
IC3207, 08	XC62AP3202P	IC	2		R3220	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3209	XC62AP2302P	IC	1		R3221-28	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	
IC3210, 11	XC62AP3202P	IC	2		R3241-48	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
IC3501	M37709M4L165	IC	1		R3249	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3502	S80727AND0	IC	1		R3250-57	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
IC3503	T74VHC08F	IC	1		R3258	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3504	T74VHC04F	IC	1		R3259, 60	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
IC3505	XC62AP3202P	IC	1		R3271	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
IC3507, 08	TC7S66F	IC	2		R3272-75	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
IC3601	M37709M4L165	IC	1		R3276-81	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	6	
IC3603	T74VHC08F	IC	1		R3282, 83	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
					R3284	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
L3101-06	VL00319K470	COIL 47UH	6		R3285-87	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	3	
L3107	VL00163J3R9	COIL 3.9UH	1		R3289-91	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	3	
L3108	VL00319K470	COIL 47UH	1		R3292	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L3111	VL00163J1R5	COIL 1.5UH	1		R3294-02	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	9	
L3121-23	VL00319K100	COIL 10UH	3		R3303-06	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
L3131, 32	VLP0133	COIL	2		R3311	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
L3501	VL00319K470	COIL 47UH	1		R3312-22	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	11	
					R3331	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
P3001, 02	VJP3454B096	CONNECTOR (MALE)	2		R3332	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
P3003	VJP3418B060	CONNECTOR (MALE)	1		R3333, 34	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
					R3335-38	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
Q3001	2SC2295-C	TRANSISTOR	1		R3339-42	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	4	
Q3501	2SB709A-R	TRANSISTOR	1		R3351	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR3501	UN2214	TRANSISTOR-RESISTOR	1		R3352	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
					R3353	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
R3101, 02	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R3361, 62	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R3103-08	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	6		R3363	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R3109	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R3364	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R3110-13	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4		R3365-69	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	5	
R3114	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R3370, 71	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R3115	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R3372-74	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	3	
R3117	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R3381	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R3118	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R3382	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R3120	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R3383	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
					R3384-89	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3390	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1	R3626	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3393	ERJ6GEYF561	M.RESISTOR CH 1/10W	560	1	R3627	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1
R3394	ERJ6GEYG391	M.RESISTOR CH 1/10W	390	1	R3628	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3397	ERJ6GEYF561	M.RESISTOR CH 1/10W	560	1	R3629	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1
R3398	ERJ6GEYG391	M.RESISTOR CH 1/10W	390	1	R3632, 33	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2
R3399	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1	R3639-49	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	11
R3400	ERJ6GEYG222	M.RESISTOR CH 1/10W	2.2K	1	R3651	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3401	ERJ6GEYF393	M.RESISTOR CH 1/10W	39K	1	R3652, 53	ERJ6GEYG222	M.RESISTOR CH 1/10W	2.2K	2
R3404	ERJ6GEYF561	M.RESISTOR CH 1/10W	560	1	R3654, 55	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3405	ERJ6GEYG391	M.RESISTOR CH 1/10W	390	1	R3656, 57	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
R3411	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1	R3673-75	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	3
R3421	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1	R3701	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3423	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1	R3703	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3432, 33	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	R3708	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3434-36	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	3	R3709	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1
R3437	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1	R3710	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1
R3438-53	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	16	R3722	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1
R3455, 56	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2	R3725-32	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	8
R3461	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	R3737-39	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	3
R3463, 64	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2	R3743-46	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	4
R3481	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	R3747-51	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	5
R3483-88	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	6	R3752	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1
R3491, 92	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	R3753	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1
R3495	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	R3754	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1
R3499	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1	R3761, 62	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3501	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1	R3763-66	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	4
R3502, 03	ERJ6GEYG222	M.RESISTOR CH 1/10W	2.2K	2	R3767-74	ERJ6GEYG272	M.RESISTOR CH 1/10W	2.7K	8
R3504, 05	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2	R3775	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
R3506, 07	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	2	R3776	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3508-10	ERJ6PBD472	M.RESISTOR CH 1/10W	4.7K	3	R3777	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1
R3511	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1	R3781-88	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	8
R3512-14	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	3	R3789-94	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	6
R3515	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1	R3795-09	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	15
R3517-19	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	3	R3811, 12	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2
R3520	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1	R3816	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3521, 22	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	R3818	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3523	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1	R3820	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1
R3524	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1	R3824	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
R3525	ERJ6GEYG105	M.RESISTOR CH 1/10W	1M	1	R3825-40	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	16
R3527, 28	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2	R3851, 52	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
R3529	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	R3853	ERJ6GEYG331	M.RESISTOR CH 1/10W	330	1
R3530	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	1	R3854, 55	ERJ6GEYG273	M.RESISTOR CH 1/10W	27K	2
R3531, 32	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2	R3861-66	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	6
R3533	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	1	R3869-84	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	16
R3534	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1	R3885	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1
R3535, 36	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	R3887, 88	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3537	ERJ6GEYG105	M.RESISTOR CH 1/10W	1M	1	R3889	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1
R3538	ERJ6GEYG271	M.RESISTOR CH 1/10W	270	1	R3890, 91	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3539, 40	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	R3892-07	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	16
R3541, 42	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2	R3908	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
R3543	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	R6001	ERDS2TJ103	C.RESISTOR	1/4W 10K	1
R3544	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1	SW3101	VSS0367-04B	SWITCH		1
R3545	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	SW3102	VSS0367-08B	SWITCH		1
R3546	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1	TG3101	VJR0646	TEST POINT		1
R3547	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	TG3102	EYF6CU	TEST POINT		1
R3548	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1	TG3501	EYF6CU	TEST POINT		1
R3549	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1	TP3101-06	EYF6CU	TEST POINT		6
R3551	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1	TP3108-12	EYF6CU	TEST POINT		5
R3552	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1	TP3113	VJR0646	TEST POINT		1
R3555, 56	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	TP3114	EYF6CU	TEST POINT		1
R3572-74	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	3	TP3501, 02	EYF6CU	TEST POINT		2
R3576-91	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	16	TP3601, 02	EYF6CU	TEST POINT		2
R3593, 94	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	VC3001	ECV1ZW50X53T	TRIMMER		1
R3597, 98	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2	VR3101-03	EVMEGSA00B24	V.RESISTOR	20K	3
R3601, 02	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	2	X3102	VXS0789	CRYSTAL OSCILLATOR		1
R3603-07	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	5	X3103	VXS0645	CRYSTAL OSCILLATOR		1
R3609, 10	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2	X3501	VXS0637	CRYSTAL OSCILLATOR		1
R3612, 13	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2			MISCELLANEOUS		
R3614	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1					
R3615	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	1					
R3616, 17	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2					
R3618	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1					
R3621, 22	ERJ6GEYOR00	M.RESISTOR CH 1/10W	0	2					
R3623, 24	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	2					
R3625	ERJ6GEYG104	M.RESISTOR CH 1/10W	100K	1					

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VML2143	CARD PULLER	1		C3354	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1	
	VML2144	CARD PULLER	1		C3361-71	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	11	
					C3381-92	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12	
					C3401	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
					C3402	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
					C3403-12	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	10	
					C3421-32	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	12	
					C3441	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1	
					C3442-45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
					C3451-58	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8	
					C3459	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C3460, 61	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3471-77	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	7	
					C3478	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1	
					C3483-86	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
					C3491-95	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
					C3501	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C3502-04	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3	
					C3506	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C3509	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C3510	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1	
					C3511	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1	
					C3512	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C3513	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
					C3514	ECUM1H150JCN	C. CAPACITOR CH 50V 15P	1	
					C3515, 16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3520	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1	
					C3521, 22	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3523-25	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	3	
					C3601	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C3602	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C3605	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C3701, 02	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3703	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
					C3704, 05	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3706	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
					C3707, 08	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3709	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1	
					C3710, 11	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3712	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3713, 14	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3715	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3716, 17	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3718	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3719, 20	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3721	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3722, 23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3724	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3725, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3727	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3731-33	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	3	
					C3741, 42	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3743	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C3744, 45	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C3746	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1	
					C6001	VCK0134K104	C. CAPACITOR 50V 0.1U	1	
					D3101	MA715	DIODE	1	
					D3102	MA335-R	DIODE	1	
					D3103, 04	MA152K	DIODE	2	
					D3111, 12	MA701A	DIODE	2	
					D3501-03	MA715	DIODE	3	
					D3507, 08	MA152K	DIODE	2	
					FL3101	VLF1116	FILTER	1	
					FL3102	VLF1117	FILTER	1	
					FL3103	VLF1118	FILTER	1	
					FL3104-06	VLF1016A223	FILTER	3	
					IC3001	UPD65841G025	IC	1	
					IC3003	MN67372A2	IC	1	
					IC3004	MN4707F	IC	1	
					IC3005	MN673711	IC	1	
					IC3006	M65401FP	IC	1	
					IC3007	L7A1433	IC	1	
■ E5	VEP83353E	F5 REC PB P.C. BOARD	1	(RTL)FOR AJ-D450E/D440E					
C3101-09	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	9						
C3121	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C3122	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3123	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1						
C3124	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3125, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C3127	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3128	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3129	ECEV1EN3R30	E. CAPACITOR CH 25V 3.3U	1						
C3130	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3131	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3132	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3134	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3135	ECUM1H151JCN	C. CAPACITOR CH 50V 150P	1						
C3136	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1						
C3137, 38	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	2						
C3139, 40	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C3141	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1						
C3142	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C3145	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3146, 47	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C3148	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3149	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3150	ECEV1EN3R30	E. CAPACITOR CH 25V 3.3U	1						
C3151	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3152	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1						
C3153-62	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	10						
C3171-84	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	14						
C3185	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3191-15	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	25						
C3216	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3221-28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8						
C3229	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3241	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C3242-49	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8						
C3250	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3261	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C3262	ECUM1H1000CN	C. CAPACITOR CH 50V 10P	1						
C3263	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3264	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1						
C3265-68	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4						
C3269	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3281-89	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	9						
C3292, 93	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	2						
C3301-18	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	18						
C3319	VCK0151	C. CAPACITOR	1						
C3320	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1						
C3321	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1						
C3322	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1						
C3323	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3324	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1						
C3325	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1						
C3326	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1						
C3327, 28	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C3329	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1						
C3330	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1						
C3331	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1						
C3332	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	1						
C3333	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C3334	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1						
C3335	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1						
C3336	ECUX1H682KBN	C. CAPACITOR CH 50V 6800P	1						
C3337	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C3341-53	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	13						

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC3008	MB81V4260S7	IC	1		IC3503	T74VHC08F	IC	1	
IC3009, 10	L7A1434	IC	2		IC3504	T74VHC04F	IC	1	
IC3011	L7A1433	IC	1		IC3505	XC62AP3202P	IC	1	
IC3012	MB81V4260S7	IC	1		IC3507, 08	TC7S66F	IC	2	
IC3013	MN673711	IC	1		IC3601	M37709M4L165	IC	1	
IC3014	M65401FP	IC	1		IC3603	T74VHC08F	IC	1	
IC3015	M52660FP	IC	1						
IC3016	MN67372A2	IC	1		L3101-06	VL00319K470	COIL	47UH	6
IC3017	MN4707F	IC	1		L3107	VL00163J3R9	COIL	3.9UH	1
IC3018-21	UPD42280G3	IC	4		L3108	VL00319K470	COIL	47UH	1
IC3022	UPD65843G026	IC	1		L3111	VL00163J1R5	COIL	1.5UH	1
IC3023	UPD42280G3	IC	1		L3121-23	VL00319K100	COIL	10UH	3
IC3024	UPD65868D022	IC	1		L3131, 32	VLP0133	COIL		2
IC3025	UPD71055GB	IC	1		L3501	VL00319K470	COIL	47UH	1
IC3027, 28	UPD42280G3	IC	2						
IC3030	UPD71055GB	IC	1		P3001, 02	VJP3454B096	CONNECTOR (MALE)		2
IC3031	T160G41-1437	IC	1		P3003	VJP3418B060	CONNECTOR (MALE)		1
IC3035	CG25123-5106	IC	1						
IC3036, 37	CY7C19920ZC	IC	2		Q3001	2SC2295-C	TRANSISTOR		1
IC3101, 02	TCVHC257F	IC	2		Q3501	2SB709A-R	TRANSISTOR		1
IC3103, 04	T74VHCT244F	IC	2						
IC3105	MC74HC125AF	IC	1		OR3501	UN2214	TRANSISTOR-RESISTOR		1
IC3107	TC7S66F	IC	1						
IC3108, 09	NJM082BM	IC	2		R3101, 02	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	2
IC3110	TC7S04F	IC	1		R3103-08	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	6
IC3111, 12	74F244SJ	IC	2		R3109	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3113	T74LCX244F	IC	1		R3110-13	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	4
IC3114	MC10H124M	IC	1		R3114	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3115-17	T74LCX244F	IC	3		R3115	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1
IC3118-20	T74VHC244F	IC	3		R3117	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	1
IC3121	MC10H125M	IC	1		R3118, 19	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
IC3122	T74LCX244F	IC	1		R3121	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	1
IC3123-26	T74VHC245F	IC	4		R3123, 24	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
IC3127	TC7S66F	IC	1		R3125-30	ERJ6GEYF472	M.RESISTOR CH 1/10W	4.7K	6
IC3128	T74VHCT244F	IC	1		R3132	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	1
IC3129	MC10H124M	IC	1		R3141, 42	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	2
IC3130	TC7S66F	IC	1		R3143	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1
IC3131	T74VHC08F	IC	1		R3145	ERJ6GEYF123	M.RESISTOR CH 1/10W	12K	1
IC3132	TCVHC257F	IC	1		R3146, 47	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
IC3133	T74VHCT244F	IC	1		R3148	ERJ6GEYG273	M.RESISTOR CH 1/10W	27K	1
IC3134-36	T74VHC244F	IC	3		R3149	ERJ6GEYG105	M.RESISTOR CH 1/10W	1M	1
IC3137	TCVHC164F	IC	1		R3150	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1
IC3138	T74VHC74F	IC	1		R3152, 53	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
IC3139	TCVHC02F	IC	1		R3154	ERJ6GEYG223	M.RESISTOR CH 1/10W	22K	1
IC3140	TC7S00F	IC	1		R3155	ERJ6GEYG272	M.RESISTOR CH 1/10W	2.7K	1
IC3141-44	74ALS541SJ	IC	4		R3156	ERJ6GEYG331	M.RESISTOR CH 1/10W	330	1
IC3145	MC10H125M	IC	1		R3157	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	1
IC3146, 47	T74LCX244F	IC	2		R3158	ERJ6GEYG105	M.RESISTOR CH 1/10W	1M	1
IC3148	T74VHC74F	IC	1		R3159	ERJ6GEYG471	M.RESISTOR CH 1/10W	470	1
IC3149, 50	SN74LS1051NS	IC	2		R3160	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	1
IC3151, 52	74ALS541SJ	IC	2		R3161	ERJ6GEYF473	M.RESISTOR CH 1/10W	47K	1
IC3153	74ALS245ASJ	IC	1		R3162, 63	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	2
IC3154	74AC139SJ	IC	1		R3164	ERJ6GEYG223	M.RESISTOR CH 1/10W	22K	1
IC3156	T74VHC244F	IC	1		R3165	ERJ6GEYG105	M.RESISTOR CH 1/10W	1M	1
IC3157	TC7S04F	IC	1		R3166	ERJ6GEYG102	M.RESISTOR CH 1/10W	1K	1
IC3158	T74VHC244F	IC	1		R3167	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3159-61	TCVHC257F	IC	3		R3168, 69	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	2
IC3162	T74VHC74F	IC	1		R3171-75	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	5
IC3163, 64	T74VHCT244F	IC	2		R3176	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3165, 66	T74VHC245F	IC	2		R3177-79	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	3
IC3167, 68	T74VHC244F	IC	2		R3181, 82	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	2
IC3169	TC7S04F	IC	1		R3185-88	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	4
IC3171	TC7S04F	IC	1		R3189-92	ERJ6GEYG471	M.RESISTOR CH 1/10W	470	4
IC3172	TC7S32F	IC	1		R3193	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3201	NJM78L09UA	IC	1		R3195-01	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	7
IC3202	NJM79L09UA	IC	1		R3202	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3203	NJM78L05UA	IC	1		R3203-06	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	4
IC3204	XC62AP3202P	IC	1		R3211	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3205	XC62AP3202P	IC	1		R3212-19	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	8
IC3206	XC62AP2302P	IC	1		R3220	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3207, 08	XC62AP3202P	IC	2		R3221-28	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	8
IC3209	XC62AP2302P	IC	1		R3241-48	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	8
IC3210, 11	XC62AP3202P	IC	2		R3249	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
IC3501	M37709M4L165	IC	1		R3250-57	ERJ6GEYG103	M.RESISTOR CH 1/10W	10K	8
IC3502	S80727ANDQ	IC	1		R3258	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3259, 60	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2	R3530	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3271	ERJ6GEYG101	M. RESISTOR CH 1/10W	100	1	R3531, 32	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3272-75	ERJ6GEYG103	M. RESISTOR CH 1/10W	10K	4	R3533	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R3276-81	ERJ6GEYG101	M. RESISTOR CH 1/10W	100	6	R3534	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3282, 83	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	2	R3535, 36	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3284	ERJ6GEYG101	M. RESISTOR CH 1/10W	100	1	R3537	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R3285-87	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	3	R3538	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R3289-91	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	3	R3539, 40	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3292	ERJ6GEYG103	M. RESISTOR CH 1/10W	10K	1	R3541, 42	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3294-02	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	9		R3544	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3303-06	ERJ6GEYG103	M. RESISTOR CH 1/10W	10K	4	R3545	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3311	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1		R3546	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3312-22	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	11	R3547	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3331	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3548	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3332	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1		R3549	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3333, 34	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	2		R3551	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3335-38	ERJ6GEYG103	M. RESISTOR CH 1/10W	10K	4	R3552	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3339-42	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	4		R3555, 56	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3351	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3572-74	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3	
R3352	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1		R3576-91	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	16
R3353	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		R3593, 94	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3361, 62	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2	R3597, 98	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3363	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R3601, 02	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R3364	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1		R3603-07	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	5	
R3365-69	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	5	R3609, 10	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3370, 71	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R3612, 13	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3372-74	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	3		R3614	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3382	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3615	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3383	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3616, 17	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3384-89	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	6		R3618	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1	
R3390	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3621, 22	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3393	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1		R3623, 24	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R3394	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1		R3625	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3397	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1		R3627	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3398	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1		R3628	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3399	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3629	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R3400	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		R3632, 33	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3401	ERJ6GEYF393	M. RESISTOR CH 1/10W 39K	1		R3639-49	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	11
R3404	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1		R3651	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3405	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1		R3652, 53	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R3411	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3654, 55	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3422	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3656, 57	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3424-27	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	4		R3673-75	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	3
R3428	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3701	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3429-31	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3		R3703	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3434-36	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3		R3708	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3437	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3709	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3454	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3710	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3456	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R3722	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R3461	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3725-32	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	8	
R3463, 64	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2		R3737-39	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
R3471	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3743-46	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3472	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1		R3747-51	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	5	
R3473	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3752	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3481	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3753	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3483-88	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6		R3754	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R3491, 92	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2	R3761, 62	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3495	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3763-66	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4	
R3499	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R3767-74	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	8	
R3501	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R3775	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R3502, 03	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2		R3776	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3504, 05	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2		R3777	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R3506, 07	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2		R3781-88	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
R3508-10	ERJ6RBD472	M. RESISTOR CH 1/10W 4.7K	3		R3789-94	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	
R3511	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1		R3795-09	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	15	
R3512-14	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3		R3811-13	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	3
R3515	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1		R3815, 16	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2
R3517-19	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3		R3818	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3520	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R3820	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1
R3521, 22	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	2	R3823, 24	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R3523	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R3825-32	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	8
R3524	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1		R3851, 52	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R3525	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		R3853	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R3527, 28	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2		R3854, 55	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	2	
R3529	ERJ6GEY0R00	M. RESISTOR CH 1/10W	0	1	R3861-66	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	6	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R3869-84	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	16
R3885	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1
R3887, 88	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3889	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	1
R3890, 91	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	2
R3892-07	ERJ6GEYG470	M.RESISTOR CH 1/10W	47	16
R3908	ERJ6GEYG101	M.RESISTOR CH 1/10W	100	1
R6001	ERDS2TJ103	C.RESISTOR 1/4W 10K	10K	1
SW3101	VSS0367-04B	SWITCH		1
SW3102	VSS0367-08B	SWITCH		1
TG3101	VJR0646	TEST POINT		1
TG3102	EYF6CU	TEST POINT		1
TG3501	EYF6CU	TEST POINT		1
TP3101-06	EYF6CU	TEST POINT		6
TP3108-12	EYF6CU	TEST POINT		5
TP3113	VJR0646	TEST POINT		1
TP3114	EYF6CU	TEST POINT		1
TP3501, 02	EYF6CU	TEST POINT		2
TP3601, 02	EYF6CU	TEST POINT		2
VC3001	ECV1ZW50X53T	TRIMMER		1
VR3101-03	EVMEGSA00B24	V.RESISTOR	20K	3
X3102	VXS0789	CRYSTAL OSCILLATOR		1
X3103	VXS0645	CRYSTAL OSCILLATOR		1
X3501	VXS0637	CRYSTAL OSCILLATOR		1
		MISCELLANEOUS		
	VML2143	CARD PULLER		1
	VML2144	CARD PULLER		1
■ E6	VEP83397B	F6 V IN P.C. BOARD		1 (RTL)FOR AJ-D450P
C1, C2	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	2
C3	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	82P	1
C4	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	1
C5-C7	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C8	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C9	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	100P	1
C51	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	100P	1
C101, 02	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C103	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C104-06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C107	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C108	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C109	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C110-12	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C113	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C114-16	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C117	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C118	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C119	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C120	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C151-58	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	8
C160	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C201-05	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	5
C207-10	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	4
C211	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	1
C251-54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	4
C256-58	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C262-66	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	5
C301	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	1
C302	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C303	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C304-06	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C307	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	1
C308	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C309	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	1
C310, 11	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C312	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C317	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	1
C318-21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	4
C351	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C352	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C353	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C354	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C355	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C356	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C357	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C358	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C359	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C360	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C363, 64	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C365	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C367	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C368	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	18P	1
C370-72	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C373	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C374	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C375	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C376-83	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	8
C401	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C402	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C403	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	47P	1
C404	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	82P	1
C405, 06	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	2
C407	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C408	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C409	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C410, 11	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	2
C417	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C418	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C419	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C420	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C421	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C425	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C426	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C427, 28	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	2
C429	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C430	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1000P	1
C431	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	1
C432	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	220P	1
C433	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1500P	1
C434	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C435	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	1
C436, 37	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C438	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C439, 40	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C441	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C442, 43	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C444	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	39P	1
C445	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	8P	1
C446	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	180P	1
C447, 48	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C450	ECEVICV4700	E.CAPACITOR CH 16V 47U	47U	1
C451	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C452	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C453	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	47P	1
C454	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C455-57	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	3
C458	ECEVICV1000	E.CAPACITOR CH 16V 10U	10U	1
C459, 60	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C461	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C462, 63	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	0.01U	2
C464-70	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	7
C472	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1
C473	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C474, 75	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	2
C476	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	33U	1
C477	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	0.1U	1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C478	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C605	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C479	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C606	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C480	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C607	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C481	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1		C608	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C482	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1		C609	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C483	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1		C610	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C484	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1		C612	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C485	ECUM1H070DCN	C.CAPACITOR CH 50V 7P	1		C613	ECEV1HN010Q	E.CAPACITOR CH 50V 1U	1	
C486	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1		C614	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C487, 88	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	2		C615	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C489	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1		C616	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C490-92	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	3		C617	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C493, 94	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C618	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C495, 96	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C619	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C497, 98	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C621	ECEV1HN010Q	E.CAPACITOR CH 50V 1U	1	
C499	ECUV1H151JCN	C.CAPACITOR CH 50V 150U	1		C622, 23	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C501	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C624, 25	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C502	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C626	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
C503	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C627	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C504	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C629	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1	
C505	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1		C651	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C506	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C652, 53	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C507	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1		C654	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C508	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C655	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C509	ECUM1H121JCN	C.CAPACITOR CH 50V 120P	1		C701	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C510	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C702, 03	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	2	
C511	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C704	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C512	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	1		C705	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C513	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1		C706	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C514, 15	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C707	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C516	ECUM1H560JCN	C.CAPACITOR CH 50V 56P	1		C708, 09	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C518	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C710	ECUM1H010CCN	C.CAPACITOR CH 50V 1P	1	
C519	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C712-14	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C520	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C715	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C521	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1		C716	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C522	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1		C717	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C523	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1		C718	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C524	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C719	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C525	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1		C720, 21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C526	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1		C722	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C527	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C723	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C528	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C724	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C529	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1		C725	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C530	ECUM1H561JCN	C.CAPACITOR CH 50V 560P	1		C726	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C531, 32	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	2		C727	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C534	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C728	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C536	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	1		C730	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C537	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C731	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C538	ECUM1H060DCN	C.CAPACITOR CH 50V 6P	1		C732	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C539	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1		C733	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C540	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C734	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C541	ECEV1HV470Q	E.CAPACITOR CH 50V 4.7U	1		C735-40	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	6	
C542	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		C751	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C545	ECUV1H120JCN	C.CAPACITOR CH 50V 12P	1		C752, 53	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	2	
C550	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1		C754	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C551	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C755	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C552	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C756	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C553	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C757	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C554	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1		C758, 59	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C555	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C762-66	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C556	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1		C768	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C557	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1		C769	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C558, 59	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C770, 71	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C561	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1		C772	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C562, 63	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C773	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C565, 66	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		C774	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C567	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C775	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C568	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C776	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C569	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C777	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C570	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C778	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C571-73	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		C780	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C601	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C781	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C602	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C782	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C603	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C783	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C604	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1		C784	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C785-87	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		FL701	VLF1294	FILTER	1	
C790	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1		FL702	VLF1016A223	FILTER	1	
C791	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		FL751	VLF1295	FILTER	1	
C792	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		FL801	VLF1295	FILTER	1	
C801	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		FL851, 52	VLF1016A223	FILTER	2	
C802, 03	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	2						
C804	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC101	AN78N09	IC	1	
C805	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC102	AN78N05	IC	1	
C806	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC103	AN79N09	IC	1	
C807	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC104	AN79N05	IC	1	
C808, 09	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC151-54	MC10H125M	IC	4	
C812-16	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	5		IC156	74F244SJ	IC	1	
C819	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC201	VS12496	IC	1	
C820, 21	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC204	74ALS245ASJ	IC	1	
C822	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC207, 08	UPD71055GB	IC	2	
C823	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC209, 10	SN74S1051NS	IC	2	
C824	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC251	VS12153A	IC	1	
C825	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC252	VS12154	IC	1	
C826	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		IC253	T74HCT541AF	IC	1	
C827	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC254	T74HCT374AF	IC	1	
C828	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1		IC255	74F574SJ	IC	1	
C830	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		IC259	T74HCT374AF	IC	1	
C931	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1		IC301	EL2082CS	IC	1	
C832	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1		IC302	NJM082BM	IC	1	
C833	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		IC303	DAC10GS	IC	1	
C834	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC351	AD818AR	IC	1	
C835-37	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		IC352	NJM084M	IC	1	
C840	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1		IC353	CXD1175AM	IC	1	
C841	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		IC354, 55	NJM78L05UA	IC	2	
C842	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		IC356	NJM79L05UA	IC	1	
C851-60	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	10		IC401	UPC1862GS	IC	1	
C901-03	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		IC402, 03	NJM78L05UA	IC	2	
C951	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		IC404	NJM79L05UA	IC	1	
C952-56	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	5		IC405	AN91A12S	IC	1	
C957	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC406	TC4W53F	IC	1	
C958	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1		IC407	MC74HC00AF	IC	1	
C959	ECEV1HNR47Q	E. CAPACITOR CH 50V 0.47U	1		IC450	AD8047AR	IC	1	
C960, 61	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	2		IC451	UPD6486GF3BA	IC	1	
C962	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC452, 53	UPD42280G3	IC	2	
C963	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC454	NJM78L05UA	IC	1	
C964, 65	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC455	NJM79L05UA	IC	1	
C966	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC456, 57	MC74HC4053F	IC	2	
C967-69	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		IC458, 59	AD8047AR	IC	2	
C970	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1		IC501	SN74LS221NS	IC	1	
C971	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		IC502	MM74HC221AM	IC	1	
C972	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC503	UPD65013BC16	IC	1	
C973	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		IC504, 05	NJM1496M	IC	2	
C974	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC507	MC74HC4053F	IC	1	
C975	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		IC508	MC74HC04AF	IC	1	
C976	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC509, 10	NJM082BM	IC	2	
C977	ECUM1H080DCN	C. CAPACITOR CH 50V 8P	1		IC511	NJM78L05UA	IC	1	
C978	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		IC512	NJM79L05UA	IC	1	
C979	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC513	MM74HC221AM	IC	1	
C980	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC514-16	MC74HC4053F	IC	3	
C981, 82	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC517	NJM78L05UA	IC	1	
C983	ECEV0JV330Q	E. CAPACITOR CH6.3V 33U	1		IC518	NJM79L05UA	IC	1	
C984-86	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		IC551	MC14538BF	IC	1	
					IC552	AN91A12S	IC	1	
D301, 02	MA152K	DIODE	2		IC553	NJM78L05UA	IC	1	
D351, 52	MA152K	DIODE	2		IC554	NJM79L05UA	IC	1	
D401	MA152WK	DIODE	1		IC555	MN53015VZM	IC	1	
D551	MA152WK	DIODE	1		IC601	SN74LS221NS	IC	1	
D601	MA335-R	DIODE	1		IC602	MC74HC00AF	IC	1	
D602	MA152WA	DIODE	1		IC603	NJM082BM	IC	1	
D603	MA152K	DIODE	1		IC604	MC74HC74AF	IC	1	
D701, 02	MA152K	DIODE	2		IC605	TC45584F	IC	1	
D751, 52	MA152K	DIODE	2		IC606	TC4W53F	IC	1	
D801, 02	MA152K	DIODE	2		IC607	MC74HC244AF	IC	1	
					IC608	SN74LS221NS	IC	1	
FL101	VLF1016A223	FILTER	1		IC701	MC74HC4053F	IC	1	
FL103	VLF1016A223	FILTER	1		IC702	AD848JR	IC	1	
FL301	VLF1294	FILTER	1		IC703	NJM084M	IC	1	
FL351	VLF1016A223	FILTER	1		IC704	CXD1175AM	IC	1	
FL451	VLF1016A223	FILTER	1		IC705, 06	NJM78L05UA	IC	2	
FL601, 02	VLF1016A223	FILTER	2		IC707	NJM79L05UA	IC	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC751	MC74HC4053F	IC	1		0656	2SB709A-R	TRANSISTOR	1	
IC752	AD848JR	IC	1		0657	2SD601A-R	TRANSISTOR	1	
IC753	NJM084M	IC	1		0658	2SC3757-R	TRANSISTOR	1	
IC754	MB40568PF	IC	1		0701	2SD601A-R	TRANSISTOR	1	
IC755, 56	NJM78L05UA	IC	2		0702	2SB709A-R	TRANSISTOR	1	
IC757	NJM79L05UA	IC	1		0703	2SD601A-R	TRANSISTOR	1	
IC758	AN78N09	IC	1		0704	2SB709A-R	TRANSISTOR	1	
IC759	T74HCT541AF	IC	1		0705	2SK198-R	TRANSISTOR	1	
IC801	MC74HC4053F	IC	1		0706	2SB709A-R	TRANSISTOR	1	
IC802	AD848JR	IC	1		0751	2SD601A-R	TRANSISTOR	1	
IC803	NJM084M	IC	1		0752	2SB709A-R	TRANSISTOR	1	
IC804	MB40568PF	IC	1		0753	2SD601A-R	TRANSISTOR	1	
IC805, 06	NJM78L05UA	IC	2		0754	2SB709A-R	TRANSISTOR	1	
IC807	NJM79L05UA	IC	1		0755	2SK198-R	TRANSISTOR	1	
IC808	AN78N09	IC	1		0756	2SD601A-R	TRANSISTOR	1	
IC851	T160G41-1437	IC	1		0801	2SD601A-R	TRANSISTOR	1	
IC852, 53	UPD42280G3	IC	2		0802	2SB709A-R	TRANSISTOR	1	
IC901-03	74F244SJ	IC	3		0803	2SD601A-R	TRANSISTOR	1	
L1, L2	VLP0133	COIL	2		0804	2SB709A-R	TRANSISTOR	1	
L101, 02	VLP0133	COIL	2		0805	2SK198-R	TRANSISTOR	1	
L301-04	VL00319K101	COIL 100UH	4		0806	2SD601A-R	TRANSISTOR	1	
L351	VL00163J101	COIL 100UH	1		OR201	MUN2212	TRANSISTOR-RESISTOR	1	
L352	VL00319K101	COIL 100UH	1		OR551	MUN2212	TRANSISTOR-RESISTOR	1	
L401	VL00163J150	COIL 15UH	1		OR701, 02	MUN2213	TRANSISTOR-RESISTOR	2	
L402-05	VL00319K100	COIL 10UH	4		OR751	MUN2213	TRANSISTOR-RESISTOR	1	
L406	VL00133J471	COIL 470UH	1		OR801	MUN2213	TRANSISTOR-RESISTOR	1	
L407	VL00319K101	COIL 100UH	1						
L451	VL00319K101	COIL 100UH	1		R7-34	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	28	
L452	VL00319K100	COIL 10UH	1		R37-53	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	17	
L454	VL00163J270	COIL 27UH	1		R56-61	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	6	
L455	VL00163J6R8	COIL 6.8UH	1		R151-62	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	12	
L456	VL00163J5R6	COIL 5.6UH	1		R163	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
L457	VL00319K101	COIL 100UH	1		R166	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
L501-03	VL00319K101	COIL 100UH	3		R168, 69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
L505, 06	VL00163J6R0	COIL 68UH	2		R201, 02	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
L507	VL00319K101	COIL 100UH	1		R208	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L553	VL00133J471	COIL 470UH	1		R214, 15	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
L601	VL00163J3R3	COIL 3.3UH	1		R216	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L651, 52	VL00319K101	COIL 100UH	2		R251	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
L703	VL00319K101	COIL 100UH	1		R301	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
L704	VL00133J821	COIL 820UH	1		R302	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
L754	VL00133J821	COIL 820UH	1		R303	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
L804	VL00133J821	COIL 820UH	1		R304, 05	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	2	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2		R306, 07	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
Q301	2SB709A-R	TRANSISTOR	1		R308	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
Q302, 03	2SD601A-R	TRANSISTOR	2		R309	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
Q351	2SD601A-R	TRANSISTOR	1		R310	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
Q352	2SB709A-R	TRANSISTOR	1		R311	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
Q353	2SK198-R	TRANSISTOR	1		R312	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q401	2SD601A-R	TRANSISTOR	1		R315, 16	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	2	
Q404	2SB709A-R	TRANSISTOR	1		R317	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
Q405, 06	2SD601A-R	TRANSISTOR	2		R318	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
Q452	2SD601A-R	TRANSISTOR	1		R352	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q454	2SB709A-R	TRANSISTOR	1		R354	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
Q501, 02	2SD601A-R	TRANSISTOR	2		R355	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
Q503	2SB709A-R	TRANSISTOR	1		R358	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
Q504, 05	2SD601A-R	TRANSISTOR	2		R359	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q507, 08	2SD601A-R	TRANSISTOR	2		R360	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
Q509	2SB709A-R	TRANSISTOR	1		R361	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q510, 11	2SD601A-R	TRANSISTOR	2		R362	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
Q512	2SB709A-R	TRANSISTOR	1		R363	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
Q513, 14	2SD601A-R	TRANSISTOR	2		R364	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
Q515	2SB709A-R	TRANSISTOR	1		R365	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
Q516-18	2SD601A-R	TRANSISTOR	3		R366	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q601	2SC3757-R	TRANSISTOR	1		R369	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
Q602, 03	2SA1226E34	TRANSISTOR	2		R370	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q604	2SC3757-R	TRANSISTOR	1		R371	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
Q651	2SB709A-R	TRANSISTOR	1		R401	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
Q652	2SD601A-R	TRANSISTOR	1		R402	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q653	2SB709A-R	TRANSISTOR	1		R403	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
Q654	2SD601A-R	TRANSISTOR	1		R404	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
Q655	XN1213	TRANSISTOR-RESISTOR	1		R407	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
					R412	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
					R413	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R414	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R415	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R416	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R417	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R418	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R419	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R420	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R421	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1	
R422	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R423, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R425	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R426	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R427	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R431	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R432	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R433	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R436	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R437	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R438-40	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R441	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R451	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	1	
R452	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R453	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R454	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R455, 56	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R457-60	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R463	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R465	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R466	ERJ6PBD162	M.RESISTOR CH 1/10W 1.6K	1	
R467	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R468	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1	
R469	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R471	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R473	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R474	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R475	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R479	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
R480	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R481	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R482	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R483-86	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	4	
R487	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R489	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R491	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R492	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R493	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R494	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R495	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1	
R501	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R502	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R503	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R504	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R505, 06	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R510, 11	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R512	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R513	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R514	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R515	ERJ6GEYG823	M.RESISTOR CH 1/10W 82K	1	
R516	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R517	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R518	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R519	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R520, 21	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R522, 23	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	2	
R524	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R525	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R526	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R527	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R528	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R529	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R530	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R531	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R532	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R533	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R534	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R535	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R537	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R538	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R539	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R540	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R542	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R543, 44	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R545	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R546, 47	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R548, 49	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	2	
R550	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R558	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R559	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R562	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R565	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R566	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R567-70	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R575	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R601	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R602	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R603	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R604	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R605	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R606, 07	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R608, 09	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R610	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R611	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R612, 13	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	2	
R614	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R615	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R616	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R617	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R618	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R619	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
R620, 21	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	2	
R622	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R623	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R624	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R625	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	1	
R626	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R631	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R651	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R652	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R653	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R657	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R658	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R659	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R660	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R661	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R663	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R664	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R665	ERJ6PBD122	M.RESISTOR CH 1/10W 1.2K	1	
R666	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R667	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R668	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R669	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R670	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R671, 72	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R701	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R702	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R703	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R704	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R707	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R708	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R711	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R712	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R713	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R714	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R715, 16	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R717	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R718	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R719	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R720, 21	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2	
R722	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R723	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R724	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R940, 41	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	2	
R725	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R942	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1	
R726	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R943	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R727	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R944	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R728	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R945	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R729	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R946	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R730	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R947	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R731	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R948, 49	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R751	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R950	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R752	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R951	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R753	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R952	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R754	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R953	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R757	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R954	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R758	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R955	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R761	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R956	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R762	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R957	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1	
R763, 64	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	2		R958	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R765, 66	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		R959	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R767	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R960	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R768	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1		R961	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R769	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1		R962, 63	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R770, 71	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2		R965	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1	
R772	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R967	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R773	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R968	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R774	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R969	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R775	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		R970	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R776	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R973, 74	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R777	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R975, 76	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R778	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R979	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R779	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R980	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R780	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R981	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R781	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R982	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R782	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R983	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R783	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		R984	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R801	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R985	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R802	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R986, 87	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R803	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		R988	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R804	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R989	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R807	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R990	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R808	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R991	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R811	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R992	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R812	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1						
R813, 14	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	2		TG1-66	VJR0646	TEST POINT	6	
R815, 16	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2						
R817	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		TP351	VJR0646	TEST POINT	1	
R818	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1		TP501	VJR0646	TEST POINT	1	
R819	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1		TP502	EYF6CU	TEST POINT	1	
R820, 21	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2		TP503, 04	VJR0646	TEST POINT	2	
R822	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		TP601-03	VJR0646	TEST POINT	3	
R823	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		TP701	VJR0646	TEST POINT	1	
R824	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		TP751	VJR0646	TEST POINT	1	
R825	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		TP801	VJR0646	TEST POINT	1	
R826	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1						
R827	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		VL601	VL00415	COIL	1	
R828	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1						
R829	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		VR301	VRV0112B502	V.RESISTOR 5K	1	
R830	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		VR351	VRV0112B502	V.RESISTOR 5K	1	
R831	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		VR451, 52	VRV0112B101	V.RESISTOR 100K	2	
R832	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		VR453, 54	VRV0112B501	V.RESISTOR 500	2	
R833	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		VR501	VRV0112B502	V.RESISTOR 5K	1	
R854-61	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	8		VR502, 03	VRV0064B102	V.RESISTOR 1K	2	
R862-68	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	7		VR504	VRV0112B502	V.RESISTOR 5K	1	
R869	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		VR505	VRV0064B102	V.RESISTOR 1K	1	
R872	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		VR507	VRV0064B102	V.RESISTOR 1K	1	
R875	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		VR510, 11	VRV0064B102	V.RESISTOR 1K	2	
R901-03	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3		VR512	VRV0112B502	V.RESISTOR 5K	1	
R930	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		VR513-16	VRV0064B102	V.RESISTOR 1K	4	
R931, 32	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	2		VR601	VRV0112B202	V.RESISTOR 2K	1	
R933	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		VR602	VRV0112B502	V.RESISTOR 5K	1	
R934	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		VR701	VRV0064B102	V.RESISTOR 1K	1	
R935	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		VR702	VRV0112B502	V.RESISTOR 5K	1	
R936	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		VR703	VRV0064B102	V.RESISTOR 1K	1	
R937	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		VR704	VRV0112B103	V.RESISTOR 10K	1	
R938	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		VR751	VRV0064B102	V.RESISTOR 1K	1	
R939	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		VR752	VRV0112B502	V.RESISTOR 5K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
VR753	VRV0064B102	V.RESISTOR 1K	1	
VR754	VRV0112B502	V.RESISTOR 5K	1	
VR801	VRV0064B102	V.RESISTOR 1K	1	
VR802	VRV0112B502	V.RESISTOR 5K	1	
VR803	VRV0064B102	V.RESISTOR 1K	1	
VR804	VRV0112B502	V.RESISTOR 5K	1	
X402	VXS0330	CRYSTAL OSCILLATOR	1	
X501	VXS0338	CRYSTAL OSCILLATOR	1	
		MISCELLANEOUS		
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	
E6	VEP83398A	F6 V IN P.C.BOARD	1	(RTL)FOR AJ-D450E
C51-54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C55	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C56	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C57	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C58-64	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	7	
C65	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C66	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C67	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C68-70	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C101-08	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C110	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C151-59	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	9	
C160	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C201-08	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
C212-15	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C251-54	ECEVICV100Q	E.CAPACITOR CH 16V 10U	4	
C255-60	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	6	
C261	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C262, 63	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C264	ECEVIEV4R7Q	E.CAPACITOR CH 25V 4.7U	1	
C265-68	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C269, 70	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	2	
C271-76	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	6	
C277	ECUM1H390JCN	C.CAPACITOR CH 50V 39P	1	
C278	ECUM1H181JCN	C.CAPACITOR CH 50V 180P	1	
C279, 80	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C281	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C283	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C284	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C285	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C286	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C287	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C288, 89	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C292	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
C301, 02	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C303-06	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	4	
C307	ECEVICV470Q	E.CAPACITOR CH 16V 47U	1	
C308-11	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C312	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C313	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C315	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C317-21	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
C322	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C324-26	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C327	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C328, 29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C330	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	1	
C331-33	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C334	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1	
C351-54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C355-57	ECEVOJV330Q	E.CAPACITOR CH6.3V 33U	3	
C358-61	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C363, 64	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C365, 66	ECEVOJV3300	E. CAPACITOR CH6. 3V 33U	2	
C368-76	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	9	
C378	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C380	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1	
C381	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C383	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1	
C386, 87	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C389	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C390, 91	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C392	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C393	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C394	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C395	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	1	
C396	ECUM1H0700CN	C. CAPACITOR CH 50V 7P	1	
C397	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C398	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
C399	ECUM1H1000CN	C. CAPACITOR CH 50V 10P	1	
C400	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C401	ECUM1H1000CN	C. CAPACITOR CH 50V 10P	1	
C402	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1	
C403-05	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C406	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
C410-13	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
C414	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C415, 16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C417	ECEVIHV4R7Q	E. CAPACITOR CH 50V 4.7U	1	
C418-20	ECEVOJV330Q	E. CAPACITOR CH6. 3V 33U	3	
C421-23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C424	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
C425	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C426	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C427, 28	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C429	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1	
C430	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C431	ECUM1H271JCN	C. CAPACITOR CH 50V 270P	1	
C432	ECEVIHNR47Q	E. CAPACITOR CH 50V 0.47U	1	
C433	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C434	ECUM1H561JCN	C. CAPACITOR CH 50V 560P	1	
C435-39	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C442	ECUM1H0700CN	C. CAPACITOR CH 50V 7P	1	
C443	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1	
C451	ECEVOJV330Q	E. CAPACITOR CH6. 3V 33U	1	
C452-55	ECEVICV100Q	E. CAPACITOR CH 16V 10U	4	
C456-60	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C461-64	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	4	
C465	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C466-70	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C471, 72	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C473	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	1	
C474	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C475	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C476	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C477	ECUM1H180JCN	C. CAPACITOR CH 50V 18P	1	
C478-80	ECEVICV470Q	E. CAPACITOR CH 16V 47U	3	
C481, 82	ECUM1H0400CN	C. CAPACITOR CH 50V 4P	2	
C483, 84	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C485, 86	ECUM1H680JCN	C. CAPACITOR CH 50V 68P	2	
C487-90	ECUM1H0800CN	C. CAPACITOR CH 50V 8P	4	
C491, 92	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
C493-96	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	4	
C497-00	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	4	
C501, 02	ECEVOJV330Q	E. CAPACITOR CH6. 3V 33U	2	
C503-06	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	4	
C510	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C511-15	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
C516	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
C517	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
C518, 19	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C520, 21	ECEVOJV330Q	E. CAPACITOR CH6. 3V 33U	2	
C524, 25	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
C526	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C553	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C740-42	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C554	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C751	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1	
C555, 56	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C752	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1	
C557	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C753-55	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C558, 59	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C756	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1	
C560	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1		C757-59	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C561	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C760, 61	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2	
C562	ECUM1H681JCN	C.CAPACITOR CH 50V 680P	1		C762	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1	
C563	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C763	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C564	ECUM1H271JCN	C.CAPACITOR CH 50V 270P	1		C764	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C565	ECUM1H471JCN	C.CAPACITOR CH 50V 470P	1		C765	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C566	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C766, 67	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2	
C567	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1		C768	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C568	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C769	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C569, 70	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C770	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C571	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C771	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1	
C572	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C772	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1	
C573	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		C775	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C576	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C776	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C578	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		C778	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C579, 80	ECEV1HN0100	E.CAPACITOR CH 50V 1U	2		C779	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C581	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1		C780	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C601, 02	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		C781	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1	
C603, 04	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C782	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1	
C651	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		C784	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C652-54	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		C786	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C655	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		C788	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C656-58	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		C789	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1	
C659, 60	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		C790	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C661, 62	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		C792	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C663, 64	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		C801-10	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	10	
C665	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C853-55	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3	
C666	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1		C856	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C667	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		C857	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C668, 69	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		C858-67	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	10	
C671	ECUM1H0100CN	C.CAPACITOR CH 50V 1P	1						
C672	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D251, 52	MA152K	DIODE	2	
C673	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		D253	MA152WK	DIODE	1	
C675	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D301, 02	MA152K	DIODE	2	
C676	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		D451	MA152K	DIODE	1	
C677	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		D501	MA152WK	DIODE	1	
C678	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1		D551	MA152K	DIODE	1	
C679	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		D552	MA335-R	DIODE	1	
C680, 81	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		D553	MA152WA	DIODE	1	
C682	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		D651, 52	MA152K	DIODE	2	
C683-85	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		D701, 02	MA152K	DIODE	2	
C686	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		D751, 52	MA152K	DIODE	2	
C687-89	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3						
C701	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		FL51, 52	VLF1016A223	FILTER	2	
C702	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		FL251	VLF1294	FILTER	1	
C703-05	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		FL301	VLF1016A223	FILTER	1	
C706	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		FL351	VLF1016A223	FILTER	1	
C707-09	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	3		FL551, 52	VLF1016A223	FILTER	2	
C710, 11	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		FL651	VLF1294	FILTER	1	
C712	ECUM1H080DCN	C.CAPACITOR CH 50V 8P	1		FL652	VLF1016A223	FILTER	1	
C713	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		FL701	VLF1295	FILTER	1	
C714	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		FL751	VLF1295	FILTER	1	
C715	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		FL801, 02	VLF1016A223	FILTER	2	
C716, 17	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	2		FL851, 52	VLF1016A223	FILTER	2	
C718	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1						
C719	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1		IC51	AN78N09	IC	1	
C720	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC52	AN78N05	IC	1	
C721	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1		IC53	AN79N09	IC	1	
C722	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		IC54	AN79N05	IC	1	
C725	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC101-03	MC10H125M	IC	3	
C726	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC107	MC10H125M	IC	1	
C728	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC110	74F244SJ	IC	1	
C729	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1		IC151, 52	SN74S1051NS	IC	2	
C730	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC153	VS12496	IC	1	
C731	ECUM1H331JCN	C.CAPACITOR CH 50V 330P	1		IC156	74ALS245ASJ	IC	1	
C732	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	1		IC164, 65	UPD71055GB	IC	2	
C734	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC201	VS12402A	IC	1	
C736	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC202	VS12382	IC	1	
C738	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		IC203	T74HCT541AF	IC	1	
C739	ECEVOJV3300	E.CAPACITOR CH6.3V 33U	1		IC204	T74HCT374AF	IC	1	

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Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
IC205	74F574SJ	IC	1		IC762	AN78N09	IC	1	
IC210	T74HCT374AF	IC	1		IC801	UPD42280G3	IC	1	
IC251	DAC10GS	IC	1		IC802	T160G41-1437	IC	1	
IC252	NJM082BM	IC	1		IC803	UPD42280G3	IC	1	
IC254	EL2082CS	IC	1		IC853	74F244SJ	IC	1	
IC255	NJM78L05UA	IC	1		IC854	CG25123-5106	IC	1	
IC256	NJM79L05UA	IC	1		IC855, 56	CY7C19920ZC	IC	2	
IC257	TC4W53F	IC	1		IC857, 58	74F244SJ	IC	2	
IC258	AN91A12S	IC	1						
IC259	MC74HC00AF	IC	1		L1, L2	VLP0133	COIL	2	
IC301	NJM79L05UA	IC	1		L51, 52	VLP0133	COIL	2	
IC302	NJM78L05UA	IC	1		L251-54	VL00319K101	COIL	100UH	4
IC303	NJM084M	IC	1		L255	VL00133J471	COIL	470UH	1
IC304	AD818AR	IC	1		L256	VL00319K101	COIL	100UH	1
IC308	CXD1175AM	IC	1		L301, 02	VL00319K101	COIL	100UH	2
IC309	NJM78L05UA	IC	1		L351, 52	VL00319K101	COIL	100UH	2
IC351, 52	NJM78L05UA	IC	2		L354	VL00163J270	COIL	27UH	1
IC353	NJM79L05UA	IC	1		L355	VL00163J6R8	COIL	6.8UH	1
IC354	CXD2105A0	IC	1		L356	VL00163J5R6	COIL	5.6UH	1
IC355	AD8047AR	IC	1		L401	VL00319K101	COIL	100UH	1
IC356	MC74HC4053F	IC	1		L451-55	VL00319K101	COIL	100UH	5
IC357, 58	AD8047AR	IC	2		L456	VL00163J470	COIL	47UH	1
IC359	MC74HC4053F	IC	1		L457, 58	VL00163J560	COIL	56UH	2
IC401	SN74LS221NS	IC	1		L501	VL00133J391	COIL	390UH	1
IC402, 03	MM74HC221AM	IC	2		L551	VL00163J3R3	COIL	3.3UH	1
IC404	MC74HC04AF	IC	1		L601, 02	VL00319K101	COIL	100UH	2
IC406	NJM78L05UA	IC	1		L651	VL00133J821	COIL	820UH	1
IC407	NJM79L05UA	IC	1		L652	VL00319K101	COIL	100UH	1
IC410	NJM082BM	IC	1		L701	VL00133J821	COIL	820UH	1
IC414	MC74HC4053F	IC	1		L751	VL00133J821	COIL	820UH	1
IC418	NJM082BM	IC	1						
IC419	MC74HC4053F	IC	1		P1, P2	VJP3454B096	CONNECTOR (MALE)	2	
IC423	NJM082BM	IC	1						
IC428	UPD65013BC16	IC	1		Q251	2SB709A-R	TRANSISTOR	1	
IC451	NJM319M	IC	1		Q252, 53	2SD601A-R	TRANSISTOR	2	
IC452, 53	NJM1496M	IC	2		Q301	2SB709A-R	TRANSISTOR	1	
IC455, 56	MC74HC4053F	IC	2		Q302	2SD601A-R	TRANSISTOR	1	
IC459	NJM78L05UA	IC	1		Q303	2SK198-R	TRANSISTOR	1	
IC460	NJM79L05UA	IC	1		Q351	2SD601A-R	TRANSISTOR	1	
IC501	NJM78L05UA	IC	1		Q352	2SB709A-R	TRANSISTOR	1	
IC502	NJM79L05UA	IC	1		Q401, 02	2SD601A-R	TRANSISTOR	2	
IC503	AN91A12S	IC	1		Q451-54	2SD601A-R	TRANSISTOR	4	
IC504	MC14538BF	IC	1		Q455-58	2SB709A-R	TRANSISTOR	4	
IC507	MM53015VZW	IC	1		Q459-67	2SD601A-R	TRANSISTOR	9	
IC551	MC74HC00AF	IC	1		Q551	2SC3757-R	TRANSISTOR	1	
IC552	TC4S584F	IC	1		Q552, 53	2SA1226E34	TRANSISTOR	2	
IC554	MC74HC74AF	IC	1		Q554	2SC3757-R	TRANSISTOR	1	
IC557	SN74LS221NS	IC	1		Q601-03	2SB709A-R	TRANSISTOR	3	
IC560	NJM082BM	IC	1		Q606-08	2SD601A-R	TRANSISTOR	3	
IC561	TC4W53F	IC	1		Q651	2SD601A-R	TRANSISTOR	1	
IC562	SN74LS221NS	IC	1		Q652-54	2SB709A-R	TRANSISTOR	3	
IC567	MC74HC244AF	IC	1		Q655	2SD601A-R	TRANSISTOR	1	
IC651	NJM78L05UA	IC	1		Q656	2SK198-R	TRANSISTOR	1	
IC652	NJM79L05UA	IC	1		Q701	2SD601A-R	TRANSISTOR	1	
IC653	MC74HC4053F	IC	1		Q702	2SB709A-R	TRANSISTOR	1	
IC655	NJM084M	IC	1		Q703	2SD601A-R	TRANSISTOR	1	
IC656	AD848JR	IC	1		Q704	2SB709A-R	TRANSISTOR	1	
IC660	CXD1175AM	IC	1		Q705	2SD601A-R	TRANSISTOR	1	
IC661	NJM78L05UA	IC	1		Q706	2SK198-R	TRANSISTOR	1	
IC701	NJM78L05UA	IC	1		Q751	2SD601A-R	TRANSISTOR	1	
IC702	NJM79L05UA	IC	1		Q752	2SB709A-R	TRANSISTOR	1	
IC703	MC74HC4053F	IC	1		Q753	2SD601A-R	TRANSISTOR	1	
IC705	NJM084M	IC	1		Q754	2SB709A-R	TRANSISTOR	1	
IC706	AD848JR	IC	1		Q755	2SD601A-R	TRANSISTOR	1	
IC710	MB40568PF	IC	1		Q756	2SK198-R	TRANSISTOR	1	
IC711	NJM78L05UA	IC	1						
IC712	AN78N09	IC	1		QR151	MUN2212	TRANSISTOR-RESISTOR	1	
IC713	T74HCT541AF	IC	1		QR501	MUN2212	TRANSISTOR-RESISTOR	1	
IC751	NJM78L05UA	IC	1						
IC752	NJM79L05UA	IC	1		R2-R8	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	7
IC753	MC74HC4053F	IC	1		R10-22	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	13
IC755	NJM084M	IC	1		R24-55	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	32
IC756	AD848JR	IC	1		R101-12	ERJ6GEY0101	M.RESISTOR CH 1/10W	100	12
IC760	MB40568PF	IC	1		R113	ERJ6GEY0R00	M.RESISTOR CH 1/10W	0	1
IC761	NJM78L05UA	IC	1		R115	ERJ6GEY0101	M.RESISTOR CH 1/10W	100	1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R118, 19	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R408	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R159, 60	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R409	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R217	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R410-12	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3	
R251	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R413	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R252	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R414	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R253	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R415	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R254	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R416	ERJ6GEYJ274	M.RESISTOR CH 1/10W 270K	1	
R255	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R417	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R256	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R418	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1	
R257	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R419	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1	
R258, 59	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	2		R420, 21	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R260	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R422	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R261	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R423, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R262, 63	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		R426, 27	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R264	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R428	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R265	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R429	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R266	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R430	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R269	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1		R431, 32	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R270	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1		R433, 34	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R271-73	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R435, 36	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R274	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R441, 42	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R275	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R451	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R276	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R452	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R277	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1		R453	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R301	ERJ6GEYG394	M.RESISTOR CH 1/10W 390K	1		R454	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R302	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1		R455	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1	
R303	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R456	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R304	ERJ6GEYG220	M.RESISTOR CH 1/10W 22	1		R457	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R305	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R458, 59	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R307	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R460, 61	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R308	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R462	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R309, 10	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R463	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R311	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R464, 65	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R313, 14	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R466	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R316, 17	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R467	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R318	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R468, 69	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	2	
R319	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R470	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R353	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R471-74	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	4	
R354	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R475-78	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	4	
R355	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1		R479	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R356	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R480, 81	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2	
R357	ERJ6GEYG560	M.RESISTOR CH 1/10W 56	1		R482, 83	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R358	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R484, 85	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R359	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1		R486, 87	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R360	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R488-91	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	4	
R362	ERJ6GEYG560	M.RESISTOR CH 1/10W 56	1		R492-99	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	8	
R363	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R500-03	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	4	
R365	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R504-07	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	4	
R366	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R508-11	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	4	
R367	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R512-15	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	4	
R368	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R516-19	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	4	
R369	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1		R520-23	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	4	
R370	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R526	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R371	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R527	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R373	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R528	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R375	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R530	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R376	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R531	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R377	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1		R534	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R379	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R535	ERJ6GEYJ684	M.RESISTOR CH 1/10W 680K	1	
R380	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R536-38	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R381, 82	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R539	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R384	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R541	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R385	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R542	ERDS2TJ392	C.RESISTOR 1/4W 3.9K	1	
R386	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R546	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R387	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R547	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R390	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R548	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R393, 94	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R551	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R395	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1		R552	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R401	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R553	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R402	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R554	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R403	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R555	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R404	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R556	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R405	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		R557, 58	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R406	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	1		R559, 60	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R407	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R561	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R562, 63	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	2		R759	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1	
R564	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K	1		R760	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R565	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1		R761	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1	
R566	ERJ6GEYG681	M. RESISTOR CH 1/10W 680	1		R762	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1	
R567	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1		R763	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1	
R571	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1		R764	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1	
R572	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		R765	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R573, 74	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2		R767	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R575	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		R768	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
R576	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R769	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R577	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R770	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R578	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1		R771, 72	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R579	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1		R773	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R581	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1		R774	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R582	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		R775	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R583, 84	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	2		R776	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1	
R586	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1		R777, 78	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2	
R601-03	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	3		R779	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R604-06	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	3		R801	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R607	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R803	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R609, 10	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	2		R806	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R616-18	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	3		R808-15	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	8	
R651	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		R816-22	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	7	
R652	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R823	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
R653	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R851	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R654	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1		R852	ERJ6GEYG271	M. RESISTOR CH 1/10W 270	1	
R655	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1		R853	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
R656	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R870-73	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	4	
R657	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1						
R658	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1		TG1-66	VJR0646	TEST POINT	6	
R659	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1		TP301	VJR0646	TEST POINT	1	
R660	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1		TP401	VJR0646	TEST POINT	1	
R661	ERJ6GEYG181	M. RESISTOR CH 1/10W 180	1		TP402	EYF6CU	TEST POINT	1	
R662	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		TP403	VJR0646	TEST POINT	1	
R664, 65	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	2		TP405	VJR0646	TEST POINT	1	
R666	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		TP451	VJR0646	TEST POINT	1	
R667	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		TP551-53	VJR0646	TEST POINT	3	
R668, 69	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2		TP651	VJR0646	TEST POINT	1	
R670	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		TP701	VJR0646	TEST POINT	1	
R671	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		TP751	VJR0646	TEST POINT	1	
R672	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1						
R673	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		VL551	VL00415	COIL	1	
R674	ERJ6GEYF333	M. RESISTOR CH 1/10W 33K	1						
R675	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1		VR251	VRV0112B502	V. RESISTOR 5K	1	
R676	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		VR301	VRV0112B502	V. RESISTOR 5K	1	
R701	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		VR351	VRV0112B101	V. RESISTOR 100K	1	
R702	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		VR352	VRV0112B201	V. RESISTOR 200	1	
R703	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1		VR353, 54	VRV0112B501	V. RESISTOR 500	2	
R704	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1		VR406, 07	VRV0064B102	V. RESISTOR 1K	2	
R705, 06	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	2		VR408-10	VRV0112B502	V. RESISTOR 5K	3	
R707, 08	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2		VR459-66	VRV0064B102	V. RESISTOR 1K	8	
R709	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	1		VR551	VRV0112B202	V. RESISTOR 2K	1	
R710	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1		VR552	VRV0112B502	V. RESISTOR 5K	1	
R711	ERJ6GEYF561	M. RESISTOR CH 1/10W 560	1		VR651	VRV0064B102	V. RESISTOR 1K	1	
R712	ERJ6GEYG394	M. RESISTOR CH 1/10W 390K	1		VR652	VRV0112B502	V. RESISTOR 5K	1	
R713	ERJ6GEYJ274	M. RESISTOR CH 1/10W 270K	1		VR701, 02	VRV0064B102	V. RESISTOR 1K	2	
R714	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	1		VR703	VRV0112B502	V. RESISTOR 5K	1	
R715	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		VR751, 52	VRV0064B102	V. RESISTOR 1K	2	
R717	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1		VR753	VRV0112B502	V. RESISTOR 5K	1	
R718	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1						
R719	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		X401	VSX0270	CRYSTAL OSCILLATOR	1	
R720	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1						
R721, 22	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2						
R723	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1						
R724	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1						
R725	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1						
R726	ERJ6GEYG105	M. RESISTOR CH 1/10W 1M	1		VM2143	CARD PULLER		1	
R727, 28	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2		VM2144	CARD PULLER		1	
R729	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1						
R751	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1						
R752	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1						
R753	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1						
R754	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1						
R755, 56	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	2						
R757, 58	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	2						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
E7	VEP84292A	F7 A PROC P.C.BOARD	1	(RTL)FOR AJ-D450P/D450E
C1, C2	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	2	
C3	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C4, C5	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	2	
C6	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C7	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C8	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C9	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	1	
C10	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C20-23	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	4	
C25, 26	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C27	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C30	ECKF1H102KB	C.CAPACITOR 50V 1000P	1	
C40	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C41	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C42	ECUM1H180JCN	C.CAPACITOR CH 50V 18P	1	
C43-49	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	7	
C60-64	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
C65	ECUX1E104KBN	C.CAPACITOR CH 25V 0.1U	1	
C66	ECUM1H100JCN	C.CAPACITOR CH 50V 10P	1	
C67	ECUM1H150JCN	C.CAPACITOR CH 50V 15P	1	
C68-73	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	6	
C80, 81	ECEV1CV470Q	E.CAPACITOR CH 16V 47U	2	
C82-86	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	5	
C87-89	ECEV1HVOR1Q	E.CAPACITOR CH 50V 0.1U	3	
C90	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C91	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C92	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C93	ECEV1CV100Q	E.CAPACITOR CH 16V 10U	1	
C94	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1	
C96, 97	ECUM1H470JCN	C.CAPACITOR CH 50V 47P	2	
C100-02	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3	
C110-24	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	15	
C130-39	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	10	
FL2	VLF1016A470	FILTER	1	
IC1, C2	MC74HC541AF	IC	2	
IC4	MC10H125M	IC	1	
IC5	MC74HC153F	IC	1	
IC6, C7	MC74HC541AF	IC	2	
IC8	MC10H124M	IC	1	
IC9	MC74HC157AF	IC	1	
IC10	AD1893JST	IC	1	
IC11	K6256DLG7L	IC	1	
IC12	T16GH7AF1216	IC	1	
IC13	K6256DLG7L	IC	1	
IC14	MN53030VPR	IC	1	
IC15, 16	K6256DLG7L	IC	2	
IC17	74AC04SJ	IC	1	
IC18, 19	74AC374SJ	IC	2	
IC20	TMSD72274PH	IC	1	
IC23	MC74HC4075F	IC	1	
IC24	NJM78L05UA	IC	1	
IC25	MC4044M	IC	1	
IC26	74AC04SJ	IC	1	
IC27	NJM78L05UA	IC	1	
IC28	MC4044M	IC	1	
IC30, 31	MC74HC541AF	IC	2	
IC34	MC74HC04AF	IC	1	
IC35	SN74S1051NS	IC	1	
IC36	74ALS541SJ	IC	1	
IC37	74ALS245ASJ	IC	1	
IC38	SN74S1051NS	IC	1	
IC39, 40	74ALS541SJ	IC	2	
IC41	MC74HC32AF	IC	1	
IC42	MC74HC138AF	IC	1	
IC43	UPD71055GB	IC	1	
IC44, 45	MC74HC74AF	IC	2	
IC46	MC74HC04AF	IC	1	
IC50	T74HCT541AF	IC	1	
IC51	MC74HC74AF	IC	1	
IC52	MC74HC157AF	IC	1	
IC53	MC74HC138AF	IC	1	
IC54	MC74HC08AF	IC	1	
IC55	MB621926	IC	1	
IC56	K6256DLG7L	IC	1	
IC57	MC74HC157AF	IC	1	
IC58	UPD71055GB	IC	1	
L1, L2	VLP0133	COIL	2	
L3	VL00426J1R8	COIL 1.8UH	1	
P1, P2	VJP3454B096	CONNECTOR (MALE)	2	
P3	VJP3635A068	CONNECTOR (MALE)	1	
R1-R8	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	8	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VML2143	CARD PULLER	1		C4238, 39	ECEA1CGE221	E. CAPACITOR 16V 220U	2	
	VML2144	CARD PULLER	1		C4240	ECEVICV4700	E. CAPACITOR CH 16V 47U	1	
					C4241	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4242, 43	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4244, 45	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4246, 47	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4248	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4249	ECEVICV4700	E. CAPACITOR CH 16V 47U	1	
■ E8	VEP84293A	F8 ADDA/CUE P.C. BOARD	1	(RTL)FOR AJ-D450P/D440P	C4250, 51	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C4281	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
					C4282, 83	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4284, 85	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2	
					C4286, 87	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4288-91	ECEVICV1000	E. CAPACITOR CH 16V 10U	4	
					C4292, 93	ECEA1CGE221	E. CAPACITOR 16V 220U	2	
					C4294	ECEVICV4700	E. CAPACITOR CH 16V 47U	1	
					C4295	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4296, 97	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4298, 99	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4300, 01	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4302	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4303	ECEVICV4700	E. CAPACITOR CH 16V 47U	1	
					C4304, 05	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C4341	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
					C4342, 43	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4344-47	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
					C4348, 49	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	2	
					C4350, 51	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4352	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
					C4353, 54	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4355, 56	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4357, 58	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C4359, 60	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4381	ECEVICN47Q	E. CAPACITOR CH 25V 4.7U	1	
					C4382	ECUV1H822KBN	E. CAPACITOR CH 50V 8200U	1	
					C4383	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
					C4384	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4385	VCC0030	C. CAPACITOR	1	
					C4386	ECUV1H822KBN	E. CAPACITOR CH 50V 8200U	1	
					C4387	ECEVICN47Q	E. CAPACITOR CH 25V 4.7U	1	
					C4388	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
					C4389	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1	
					C4390	ECUV1H151JCN	C. CAPACITOR CH 50V 150U	1	
					C4391	ECUM1H272KBN	C. CAPACITOR CH 50V 2700P	1	
					C4392	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4393	ECEVICV4700	E. CAPACITOR CH 16V 47U	1	
					C4394	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1	
					C4395	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					C4396	ECUM1H273KBN	C. CAPACITOR CH 50V 0.027U	1	
					C4397	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
					C4398	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1	
					C4399	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1	
					C4400	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
					C4401, 02	ECU1C104JB	P. CAPACITOR 16V 0.1U	2	
					C4403	ECUM1C224KBM	C. CAPACITOR CH 16V 0.22U	1	
					C4404	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1	
					C4405	ECU1C104JB	P. CAPACITOR 16V 0.1U	1	
					C4406	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1	
					C4407	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
					C4408	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1	
					C4409	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
					C4410	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
					C4411	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1	
					C4412	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1	
					C4413	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1	
					C4414	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1	
					C4415	ECST1VY684Z	T. CAPACITOR CH 35V 0.68U	1	
					C4416, 17	ECEVICV100Q	E. CAPACITOR CH 16V 10U	2	
					C4418, 19	ECEVICV220Q	E. CAPACITOR CH 16V 22U	2	
					C4420, 21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C4422	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
					C4423	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
					C4424, 25	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2	
					C4426, 27	ECEVICV4700	E. CAPACITOR CH 16V 47U	2	
					C4428	ECEVICN47Q	E. CAPACITOR CH 25V 4.7U	1	
C4001-04	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4						
C4005, 06	ECEVICV4700	E. CAPACITOR CH 16V 47U	2						
C4007, 08	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2						
C4009, 10	ECEA1HGE330	E. CAPACITOR 50V 33U	2						
C4023, 24	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C4061-64	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4						
C4065, 66	ECEVICV4700	E. CAPACITOR CH 16V 47U	2						
C4067, 68	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2						
C4069, 70	ECEA1HGE330	E. CAPACITOR 50V 33U	2						
C4083, 84	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C4121	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4122	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	1						
C4123	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1						
C4124	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4125	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1						
C4126	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4127, 28	ECEVICV100Q	E. CAPACITOR CH 16V 10U	2						
C4129	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4130	ECEVICV4700	E. CAPACITOR CH 16V 47U	1						
C4131	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1						
C4132	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4133	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1						
C4134	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4135	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1						
C4136	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4137, 38	ECEVOJV470Q	E. CAPACITOR CH 6.3V 47U	2						
C4139, 40	ECUM1H820JCN	C. CAPACITOR CH 50V 82P	2						
C4141, 42	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2						
C4143, 44	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	2						
C4145-48	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4						
C4149	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1						
C4150	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4151	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1						
C4152, 53	ECEVICV100Q	E. CAPACITOR CH 16V 10U	2						
C4154, 55	ECEVICV220Q	E. CAPACITOR CH 16V 22U	2						
C4158	ECUV1H151JCN	C. CAPACITOR CH 50V 150U	1						
C4160	ECUV1H151JCN	C. CAPACITOR CH 50V 150U	1						
C4162	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1						
C4163, 64	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2						
C4167	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	1						
C4169	ECUM1H221JCN	C. CAPACITOR CH 50V 220P	1						
C4171	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1						
C4180	ECCE1H331J	C. CAPACITOR 50V 330P	1						
C4191	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1						
C4192	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4193	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1						
C4194-96	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3						
C4197	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1						
C4198	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1						
C4199	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1						
C4200	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C4201-03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3						
C4204	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1						
C4205	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1						
C4206	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1						
C4208, 09	ECEVICN100Q	E. CAPACITOR CH 16V 10U	2						
C4211	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1						
C4221-24	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4						
C4225, 26	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2						
C4227	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1						
C4228, 29	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2						
C4230, 31	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	2						
C4232, 33	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2						
C4234-37	ECEVICV100Q	E. CAPACITOR CH 16V 10U	4						

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4429	ECU1C104JB	P. CAPACITOR 16V 0.1U	1		IC4225	NJM2043MD	IC	1	
C4430	ECUX1C105KBM	C. CAPACITOR CH 16V 1U	1		IC4226	MC14053BF	IC	1	
C4461, 62	ECEV1EN4R7Q	E. CAPACITOR CH 25V 4.7U	2		IC4281	NJM4580ED	IC	1	
C4463	ECEV0JV220Q	E. CAPACITOR CH 6.3V 22U	1		IC4282	MC14052BF	IC	1	
C4464	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		IC4283	NJM2043MD	IC	1	
C4465-67	ECEV1EN4R7Q	E. CAPACITOR CH 25V 4.7U	3		IC4284	MC14053BF	IC	1	
C4468	ECEV1CV220Q	E. CAPACITOR CH 16V 22U	1		IC4341, 42	NJM4580ED	IC	2	
C4469-72	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC4343	NJM4556AM	IC	1	
C4473	ECEV1CV220Q	E. CAPACITOR CH 16V 22U	1		IC4344	MC14052BF	IC	1	
C4474, 75	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC4345	NJM4580ED	IC	1	
C4501-03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3		IC4381	NJM4580ED	IC	1	
C4504	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		IC4382	MC14053BF	IC	1	
C4505, 06	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	2		IC4383	CXA1102M	IC	1	
C4507	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC4384, 85	NJM4580ED	IC	2	
C4508, 09	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	2		IC4386	MC14052BF	IC	1	
C4510	ECEV1CV100Q	E. CAPACITOR CH 16V 10U	1		IC4388	NJM4580ED	IC	1	
C4511	ECEV1H4R7Q	E. CAPACITOR CH 50V 4.7U	1		IC4389	AN78N09	IC	1	
C4512	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1		IC4390	AN79N09	IC	1	
C4513	YCF2JAB681J	C. CAPACITOR 630V 680P	1		IC4391, 92	NJM4580ED	IC	2	
C4514, 15	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	2		IC4461-63	NJM4580ED	IC	3	
C4516, 17	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC4464	NJM78L05UA	IC	1	
C4518	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC4465	NJM79L05UA	IC	1	
C4519	ECEV1CV220Q	E. CAPACITOR CH 16V 22U	1		IC4466	MC14053BF	IC	1	
C4520	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC4501	AN78N09	IC	1	
C4521	YCF2GAB682J	C. CAPACITOR 400V 6800P	1		IC4551, 52	SN74S1051MS	IC	2	
C4522	ECEV1CV220Q	E. CAPACITOR CH 16V 22U	1		IC4553	74ALS245ASJ	IC	1	
C4523	YCF2GAB682J	C. CAPACITOR 400V 6800P	1		IC4554	74ALS541SJ	IC	1	
C4524	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1		IC4555	74F04SJ	IC	1	
C4551	ECEV1CV470Q	E. CAPACITOR CH 16V 47U	1		IC4556	74AC139SJ	IC	1	
C4552	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC4557, 58	UPD71055GB	IC	2	
C4553-56	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4						
C4558	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		L4121	VLQ0163J100	C0IL 10UH	1	
C4559, 60	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2		L4191	VLQ0163J100	C0IL 10UH	1	
					L4381	VLQ0423J472	C0IL 4700UH	1	
D4001, 02	MA157	DIODE	2						
D4061, 62	MA157	DIODE	2		P4001, 02	VJP3454B096	CONNECTOR (MALE)	2	
D4221, 22	MA157	DIODE	2						
D4281, 82	MA157	DIODE	2		Q4221	2SD1994A-R	TRANSISTOR	1	
D4341	MA157	DIODE	1		Q4222	2SB1322A-R	TRANSISTOR	1	
D4342-44	MA152WK	DIODE	3		Q4223	2SD1994A-R	TRANSISTOR	1	
D4461	MA152A	DIODE	1		Q4224	2SB1322A-R	TRANSISTOR	1	
D4501-03	MA152A	DIODE	3		Q4225	2SD602A-R	TRANSISTOR	1	
					Q4226-29	2SD1328	TRANSISTOR	4	
FL4381	EIR70F012B	TRANSFORMER	1		Q4230	2SB710A-R	TRANSISTOR	1	
FL4382	VLF1069	FILTER	1		Q4281	2SD1994A-R	TRANSISTOR	1	
FL4501, 02	VLF0941C223	FILTER	2		Q4282	2SB1322A-R	TRANSISTOR	1	
FL4551	VLF0941C223	FILTER	1		Q4283	2SD1994A-R	TRANSISTOR	1	
					Q4284	2SB1322A-R	TRANSISTOR	1	
IC4001	NJM78L09UA	IC	1		Q4285	2SD602A-R	TRANSISTOR	1	
IC4002	NJM79L09UA	IC	1		Q4286-89	2SD1328	TRANSISTOR	4	
IC4003, 04	NJM4580ED	IC	2		Q4290	2SB710A-R	TRANSISTOR	1	
IC4005	MC14052BF	IC	1		Q4341-44	2SB710A-R	TRANSISTOR	4	
IC4006	NJM4580ED	IC	1		Q4345, 46	2SD1328	TRANSISTOR	2	
IC4008	MC14053BF	IC	1		Q4347	2SD602A-R	TRANSISTOR	1	
IC4061	NJM78L09UA	IC	1		Q4348	2SD1328	TRANSISTOR	1	
IC4062	NJM79L09UA	IC	1		Q4350	2SB710A-R	TRANSISTOR	1	
IC4063, 64	NJM4580ED	IC	2		Q4381, 82	2SD1149-R	TRANSISTOR	2	
IC4065	MC14052BF	IC	1		Q4383	2SB792-R	TRANSISTOR	1	
IC4066	NJM4580ED	IC	1		Q4384, 85	2SD602A-R	TRANSISTOR	2	
IC4068	MC14053BF	IC	1		Q4386	2SB710A-R	TRANSISTOR	1	
IC4121, 22	NJM2100MD	IC	2		Q4461-63	2SD1328	TRANSISTOR	3	
IC4123	T74VHC244F	IC	1		Q4501	2SB710A-R	TRANSISTOR	1	
IC4124	NJM78L05UA	IC	1		Q4502	2SD602A-R	TRANSISTOR	1	
IC4125-27	XC62AP3002P	IC	3		Q4503	2SB710A-R	TRANSISTOR	1	
IC4128	AK4503VF	IC	1		Q4504-06	2SD602A-R	TRANSISTOR	3	
IC4129	NJM4580ED	IC	1		Q4507	2SB710A-R	TRANSISTOR	1	
IC4131	T74VHC244F	IC	1		Q4508	2SD602A-R	TRANSISTOR	1	
IC4191	NJM78L05UA	IC	1		Q4509	2SB710A-R	TRANSISTOR	1	
IC4192	MC74HC541AF	IC	1		Q4510-13	2SD602A-R	TRANSISTOR	4	
IC4193	AK4320VM	IC	1						
IC4194, 95	NJM4580ED	IC	2		QR4191	UN2213	TRANSISTOR-RESISTOR	1	
IC4221	NJM78L05UA	IC	1		QR4341, 42	UN2213	TRANSISTOR-RESISTOR	2	
IC4222	NJM79L05UA	IC	1		QR4381, 82	UN2213	TRANSISTOR-RESISTOR	2	
IC4223	NJM4580ED	IC	1						
IC4224	MC14052BF	IC	1		R4001	ERJ6GEY6562	M.RESISTOR CH 1/10W 5.6K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4002	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4168-70	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4003	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4191	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4004	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1		R4192, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R4005	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4194	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4006	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R4195-97	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4007	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4198	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4008, 09	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2		R4199-01	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4010, 11	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2		R4203	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R4016	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4204, 05	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R4017	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4206, 07	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	
R4018	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4210, 11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4019	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4213	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4020	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4214, 15	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4021	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4217	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4022	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4219	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4023	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4221	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4029, 30	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	2		R4222	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4032	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4223	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4034	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4224	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1	
R4036, 37	ERJ6RED470	M.RESISTOR CH 1/10W 47	2		R4225	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R4040	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R4226	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R4041	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4227	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1	
R4043	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4228	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R4045	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4229	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4046, 47	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R4230	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4048	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R4231	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4049-55	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	7		R4232	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R4061	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R4233-36	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4	
R4062	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4237, 38	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2	
R4063	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4239, 40	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2	
R4064	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1		R4241	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4065	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4242	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4066	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R4243	ERJ6RED150	M.RESISTOR CH 1/10W 15	1	
R4067	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4244	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4068, 69	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2		R4245-48	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4	
R4070, 71	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2		R4249	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4076	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4250-53	ERJ14YJ100	M.RESISTOR CH 1/4W 10	4	
R4077	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4254	ERJ6RED150	M.RESISTOR CH 1/10W 15	1	
R4078	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4255, 56	ERJ14YJ220	M.RESISTOR CH 1/4W 22	2	
R4079	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4257, 58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4080	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4259	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4081	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4260, 61	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4082	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4262	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4083	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4263-66	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R4089, 90	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	2		R4267-70	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R4092	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4281	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4094	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4282	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4096, 97	ERJ6RED470	M.RESISTOR CH 1/10W 47	2		R4283	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4100	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R4284	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1	
R4101	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4285	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R4103	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4286	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R4105	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4287	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1	
R4106, 07	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R4288	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R4108	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R4289	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4109-15	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	7		R4290	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4121, 22	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	2		R4291	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4123, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4292	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R4125, 26	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R4293-96	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4	
R4127-30	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4		R4297, 98	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2	
R4131, 32	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2		R4299, 00	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2	
R4133-38	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	6		R4301	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4139-42	ERJ6RBD471	M.RESISTOR CH 1/10W 470	4		R4302	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4143	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4303	ERJ6RED150	M.RESISTOR CH 1/10W 15	1	
R4144, 45	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2		R4304	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4146, 47	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R4305-08	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4	
R4150	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R4309	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4152	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R4310-13	ERJ14YJ100	M.RESISTOR CH 1/4W 10	4	
R4154	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R4314	ERJ6RED150	M.RESISTOR CH 1/10W 15	1	
R4156, 57	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R4315, 16	ERJ14YJ220	M.RESISTOR CH 1/4W 22	2	
R4160	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4317, 18	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4161	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4319	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4162	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4320, 21	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4164	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4322	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4165	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4323-26	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
R4167	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4327-30	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4341, 42	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4439	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4343	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4441	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4344	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4442-44	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R4345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R4445	ERJ6RBD202	M.RESISTOR CH 1/10W 2K	1	
R4346	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R4446	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4347-50	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	4		R4447	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4351, 52	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4448	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4353	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4449	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4354	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4450	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4355	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4451	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4356-58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R4461	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
R4359	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4462	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
R4360	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4463	ERJ6RBD271	M.RESISTOR CH 1/10W 270	1	
R4362-64	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R4464	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R4365	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R4465	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R4366	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4466	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4367	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4467	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4368	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4468	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R4369	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4470	ERJ6RBD243	M.RESISTOR CH 1/10W 24K	1	
R4371, 72	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R4472	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R4374	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R4473	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1	
R4375	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4474	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4376	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R4476	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R4377	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4477	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4381, 82	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2		R4478	ERJ6RED124	M.RESISTOR CH 1/10W 120K	1	
R4383	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R4479	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4384	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1		R4480	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4385	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4481	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R4386	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R4482-84	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R4387	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R4485	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4388	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4486	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4389	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4487, 88	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4390	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4489	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4391, 92	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R4491, 92	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R4393	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4493	ERJ6RBD273	M.RESISTOR CH 1/10W 27K	1	
R4394	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4494	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R4395, 96	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R4495	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
R4397	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4501	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4398	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R4502	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4399	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4503, 04	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2	
R4400	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R4505	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4401	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4506	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4402	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4507	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4403	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4508	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4404	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R4509	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R4405	ERJ6GEYF124	M.RESISTOR CH 1/10W 120K	1		R4510	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4406	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4511	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R4407	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R4512	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R4408	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R4513	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4409	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4514	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R4410	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1		R4515	ERJ6GEYG220	M.RESISTOR CH 1/10W 22	1	
R4411	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1		R4516, 17	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2	
R4412	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4518	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4413	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		R4519	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4414	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R4520	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4415	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1		R4521	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4416	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R4522, 23	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R4417	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4524	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R4418	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R4525, 26	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R4419	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4527	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R4420	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R4528	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4422	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1		R4529	ERJ6GEYG180	M.RESISTOR CH 1/10W 18	1	
R4423	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4530, 31	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2	
R4424	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R4532	ERJ6GEYJ180	M.RESISTOR CH 1/10W 18	1	
R4425	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R4533	ERJ6GEYG180	M.RESISTOR CH 1/10W 18	1	
R4426	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1		R4534	ERJ6GEYJ180	M.RESISTOR CH 1/10W 18	1	
R4427	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		R4535	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R4428	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4551, 52	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4429	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R4553, 54	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R4431	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4555-62	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
R4433	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1						
R4434	ERJ6RBD433	M.RESISTOR CH 1/10W 43K	1		SW4001	VSS0126	SWITCH	1	
R4435	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		SW4061	VSS0126	SWITCH	1	
R4436	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		SW4381	VSS0367-04B	SWITCH	1	
R4437	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		SW4382	VSS0342	SWITCH	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
T4501	VLT0866	TRANSFORMER	1	
T4502	VLT0868	TRANSFORMER	1	
T4503, 04	VLT0867	TRANSFORMER	2	
TG4121, 22	VJR0646	TEST POINT	2	
TG4191, 92	VJR0646	TEST POINT	2	
TG4461	VJR0646	TEST POINT	1	
TG4501	VJR0646	TEST POINT	1	
TP4121-26	VJR0646	TEST POINT	6	
TP4191-93	VJR0646	TEST POINT	3	
TP4221	VJR0646	TEST POINT	1	
TP4281	VJR0646	TEST POINT	1	
TP4381-83	VJR0646	TEST POINT	3	
TP4501, 02	VJR0646	TEST POINT	2	
VR4002	VRV0112B103	V.RESISTOR 10K	1	
VR4062	VRV0112B103	V.RESISTOR 10K	1	
VR4221	VRV0112B103	V.RESISTOR 10K	1	
VR4281	VRV0112B103	V.RESISTOR 10K	1	
VR4341	VRV0112B103	V.RESISTOR 10K	1	
VR4381	VRV0112B103	V.RESISTOR 10K	1	
VR4382	VRV0064B503	V.RESISTOR 50K	1	
VR4383	VRV0112B502	V.RESISTOR 5K	1	
VR4384	VRV0112B103	V.RESISTOR 10K	1	
VR4385	VRV0112B203	V.RESISTOR 20K	1	
VR4501	VRV0112B104	V.RESISTOR 100K	1	
		MISCELLANEOUS		
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	
E8	VEP842938	F8 ADDA/CUE P.C.BOARD	1	(RTL)FOR AJ-D450E/D440E
C4001-04	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C4005, 06	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2	
C4007, 08	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4009, 10	ECEA1HGE330	E.CAPACITOR 50V 33U	2	
C4023, 24	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4061-64	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C4065, 66	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2	
C4067, 68	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2	
C4069, 70	ECEA1HGE330	E.CAPACITOR 50V 33U	2	
C4083, 84	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
C4121	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4122	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	1	
C4123	ECEV1CV2200	E.CAPACITOR CH 16V 22U	1	
C4124	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4125	ECEV1CV2200	E.CAPACITOR CH 16V 22U	1	
C4126	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4127, 28	ECEV1CV1000	E.CAPACITOR CH 16V 10U	2	
C4129	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4130	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1	
C4131	ECEV0JV1010	E.CAPACITOR CH6.3V 100U	1	
C4132	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4133	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C4134	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4135	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	1	
C4136	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4137, 38	ECEV0JV4700	E.CAPACITOR CH6.3V 47U	2	
C4139, 40	ECUM1H820JCN	C.CAPACITOR CH 50V 82P	2	
C4141, 42	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
C4143, 44	ECUM1H222KBN	C.CAPACITOR CH 50V 2200P	2	
C4145-48	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
C4149	ECEV1CV1000	E.CAPACITOR CH 16V 10U	1	
C4150	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
C4151	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C4152, 53	ECEV1CV1000	E.CAPACITOR CH 16V 10U	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4154, 55	ECEVICV2200	E. CAPACITOR CH 16V 22U	2	
C4158	ECUVIH151JCN	C. CAPACITOR CH 50V 150U	1	
C4160	ECUVIH151JCN	C. CAPACITOR CH 50V 150U	1	
C4162	ECUMIH104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C4163, 64	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C4167	ECUXIH102JCN	C. CAPACITOR CH 50V 1000P	1	
C4169	ECUMIH221JCN	C. CAPACITOR CH 50V 220P	1	
C4171	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4180	ECCFIH331J	C. CAPACITOR 50V 330P	1	
C4191	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4192	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C4193	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1	
C4194-96	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C4197	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1	
C4198	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4199	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	1	
C4200	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4201-03	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	3	
C4204	ECEVICV100Q	E. CAPACITOR CH 16V 10U	1	
C4205	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	1	
C4206	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4208, 09	ECEVICN100Q	E. CAPACITOR CH 16V 10U	2	
C4211	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4221-24	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	4	
C4225, 26	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4227	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4228, 29	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4230, 31	ECUMIH470JCN	C. CAPACITOR CH 50V 47P	2	
C4232, 33	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4234-37	ECEVICV100Q	E. CAPACITOR CH 16V 10U	4	
C4238, 39	ECEA1CGE221	E. CAPACITOR 16V 220U	2	
C4240	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4241	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4242, 43	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4244, 45	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4246, 47	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4248	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4249	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4250, 51	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C4281	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4282, 83	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4284, 85	ECUMIH470JCN	C. CAPACITOR CH 50V 47P	2	
C4286, 87	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4288-91	ECEVICV100Q	E. CAPACITOR CH 16V 10U	4	
C4292, 93	ECEA1CGE221	E. CAPACITOR 16V 220U	2	
C4294	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4295	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4296, 97	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4298, 99	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4300, 01	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4302	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4303	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1	
C4304, 05	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	2	
C4341	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1	
C4342, 43	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4344-47	ECUMIE104ZFN	C. CAPACITOR CH 25V 0.1U	4	
C4348, 49	ECEVOJV101Q	E. CAPACITOR CH 6.3V 100U	2	
C4350, 51	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4352	ECEVICN100Q	E. CAPACITOR CH 16V 10U	1	
C4353, 54	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4355, 56	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4357, 58	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	2	
C4359, 60	ECEVICV470Q	E. CAPACITOR CH 16V 47U	2	
C4381	ECEVIN4R7Q	E. CAPACITOR CH 25V 4.7U	1	
C4382	ECUVIH822KBN	E. CAPACITOR CH 50V 8200U	1	
C4383	ECUMIH222KBN	C. CAPACITOR CH 50V 2200P	1	
C4384	ECUMIH103KBN	C. CAPACITOR CH 50V 0.01U	1	
C4385	VCC0030	C. CAPACITOR	1	
C4386	ECUVIH822KBN	E. CAPACITOR CH 50V 8200U	1	
C4387	ECEVIN4R7Q	E. CAPACITOR CH 25V 4.7U	1	
C4388	ECUMIH272KBN	C. CAPACITOR CH 50V 2700P	1	</

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C4393	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		FL4501, 02	VLF0941C223	FILTER	2	
C4394	ECUM1H390JCN	C. CAPACITOR CH 50V 39P	1		FL4551	VLF0941C223	FILTER	1	
C4395	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1						
C4396	ECUM1H273KBN	C. CAPACITOR CH 50V 0.027U	1		IC4001	NJM78L09UA	IC	1	
C4397	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4002	NJM79L09UA	IC	1	
C4398	ECUM1E473KBN	C. CAPACITOR CH 25V 0.047U	1		IC4003, 04	NJM4580ED	IC	2	
C4399	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1		IC4005	MC14052BF	IC	1	
C4400	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4006	NJM4580ED	IC	1	
C4401, 02	ECUJ1C104JB	P. CAPACITOR 16V 0.1U	2		IC4008	MC14053BF	IC	1	
C4403	ECUM1C224KBM	C. CAPACITOR CH 16V 0.22U	1		IC4061	NJM78L09UA	IC	1	
C4404	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1		IC4062	NJM79L09UA	IC	1	
C4405	ECUJ1C104JB	P. CAPACITOR 16V 0.1U	1		IC4063, 64	NJM4580ED	IC	2	
C4406	ECUM1C394KBM	C. CAPACITOR CH 16V 0.39U	1		IC4065	MC14052BF	IC	1	
C4407	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		IC4066	NJM4580ED	IC	1	
C4408	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC4068	MC14053BF	IC	1	
C4409	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4121, 22	NJM2100MD	IC	2	
C4410	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC4123	T74VHC244F	IC	1	
C4411	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	1		IC4124	NJM78L05UA	IC	1	
C4412	ECUX1E104KBN	C. CAPACITOR CH 25V 0.1U	1		IC4125-27	XC62AP3002P	IC	3	
C4413	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC4128	AK4503VF	IC	1	
C4414	ECEVOJV1010	E. CAPACITOR CH6.3V 100U	1		IC4129	NJM4580ED	IC	1	
C4415	ECST1VY684Z	T. CAPACITOR CH 35V 0.68U	1		IC4131	T74VHCT244F	IC	1	
C4416, 17	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2		IC4191	NJM78L05UA	IC	1	
C4418, 19	ECEV1CV2200	E. CAPACITOR CH 16V 22U	2		IC4192	MC74HC541AF	IC	1	
C4420, 21	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC4193	AK4320VM	IC	1	
C4422	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		IC4194, 95	NJM4580ED	IC	2	
C4423	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1		IC4221	NJM78L05UA	IC	1	
C4424, 25	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC4222	NJM79L05UA	IC	1	
C4426, 27	ECEV1CV4700	E. CAPACITOR CH 16V 47U	2		IC4223	NJM4580ED	IC	1	
C4428	ECEV1EN4R7Q	E. CAPACITOR CH 25V 4.7U	1		IC4224	MC14052BF	IC	1	
C4429	ECUJ1C104JB	P. CAPACITOR 16V 0.1U	1		IC4225	NJM2043MD	IC	1	
C4430	ECUX1C105KBM	C. CAPACITOR CH 16V 1U	1		IC4226	MC14053BF	IC	1	
C4461, 62	ECEV1EN4R7Q	E. CAPACITOR CH 25V 4.7U	2		IC4281	NJM4580ED	IC	1	
C4463	ECEVOJV220Q	E. CAPACITOR CH6.3V 22U	1		IC4282	MC14052BF	IC	1	
C4464	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC4283	NJM2043MD	IC	1	
C4465-67	ECEV1EN4R7Q	E. CAPACITOR CH 25V 4.7U	3		IC4284	MC14053BF	IC	1	
C4468	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4341, 42	NJM4580ED	IC	2	
C4469-72	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4		IC4343	NJM4556AM	IC	1	
C4473	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4344	MC14052BF	IC	1	
C4474, 75	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		IC4345	NJM4580ED	IC	1	
C4501-03	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	3		IC4381	NJM4580ED	IC	1	
C4504	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC4382	MC14053BF	IC	1	
C4505, 06	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	2		IC4383	CXA1102M	IC	1	
C4507	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC4384, 85	NJM4580ED	IC	2	
C4508, 09	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	2		IC4386	MC14052BF	IC	1	
C4510	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		IC4388	NJM4580ED	IC	1	
C4511	ECEV1HV4R7Q	E. CAPACITOR CH 50V 4.7U	1		IC4389	AN78N09	IC	1	
C4512	ECUX1H223KBN	C. CAPACITOR CH 50V 0.22U	1		IC4390	AN79N09	IC	1	
C4513	VCF2JAB681J	C. CAPACITOR 630V 680P	1		IC4391, 92	NJM4580ED	IC	2	
C4514, 15	ECUM1C474KBM	C. CAPACITOR CH 16V 0.47U	2		IC4461-63	NJM4580ED	IC	3	
C4516, 17	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		IC4464	NJM78L05UA	IC	1	
C4518	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC4465	NJM79L05UA	IC	1	
C4519	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		IC4466	MC14053BF	IC	1	
C4520	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		IC4501	AN78N09	IC	1	
C4521	VCF2GAB682J	C. CAPACITOR 400V 6800P	1		IC4551, 52	SN74LS1051NS	IC	2	
C4522	ECEV1CV220Q	E. CAPACITOR CH 16V 22U	1		IC4553	74ALS245ASJ	IC	1	
C4523	VCF2GAB682J	C. CAPACITOR 400V 6800P	1		IC4554	74ALS541SJ	IC	1	
C4524	ECUM1H471JCN	C. CAPACITOR CH 50V 470P	1		IC4555	74F04SJ	IC	1	
C4551	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		IC4556	74AC139SJ	IC	1	
C4552	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		IC4557, 58	UPD71055GB	IC	2	
C4553-56	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	4						
C4558	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		L4121	VL00163J100	COIL	10UH	1
C4559, 60	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2		L4191	VL00163J100	COIL	10UH	1
					L4381	VL00423J472	COIL	4700UH	1
D4001, 02	MA157	DIODE	2						
D4061, 62	MA157	DIODE	2		P4001, 02	VJP3454B096	CONNECTOR (MALE)		2
D4221, 22	MA157	DIODE	2						
D4281, 82	MA157	DIODE	2		Q4221	2SD1994A-R	TRANSISTOR		1
D4341	MA157	DIODE	1		Q4222	2SB1322A-R	TRANSISTOR		1
D4342-44	MA152WK	DIODE	3		Q4223	2SD1994A-R	TRANSISTOR		1
D4461	MA152A	DIODE	1		Q4224	2SB1322A-R	TRANSISTOR		1
D4501-03	MA152A	DIODE	3		Q4225	2SD602A-R	TRANSISTOR		1
					Q4226-29	2SD1328	TRANSISTOR		4
FL4381	EIR70F012B	TRANSFORMER	1		Q4230	2SB710A-R	TRANSISTOR		1
FL4382	VLF1069	FILTER	1		Q4281	2SD1994A-R	TRANSISTOR		1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
04282	2SB1322A-R	TRANSISTOR	1		R4094	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
04283	2SD1994A-R	TRANSISTOR	1		R4096, 97	ERJ6RBD470	M.RESISTOR CH 1/10W 47	2	
04284	2SB1322A-R	TRANSISTOR	1		R4100	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
04285	2SD602A-R	TRANSISTOR	1		R4101	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
04286-89	2SD1328	TRANSISTOR	4		R4103	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
04290	2SB710A-R	TRANSISTOR	1		R4105	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
04341-44	2SB710A-R	TRANSISTOR	4		R4106, 07	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
04347	2SD602A-R	TRANSISTOR	1		R4108	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1	
04348	2SD1328	TRANSISTOR	1		R4109-15	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	7	
04350	2SB710A-R	TRANSISTOR	1		R4121, 22	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	2	
04381, 82	2SD1149-R	TRANSISTOR	2		R4123, 24	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
04383	2SB792-R	TRANSISTOR	1		R4125, 26	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
04384, 85	2SD602A-R	TRANSISTOR	2		R4127-30	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4	
04386	2SB710A-R	TRANSISTOR	1		R4131, 32	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
04461-63	2SD1328	TRANSISTOR	3		R4133-38	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	6	
04501	2SB710A-R	TRANSISTOR	1		R4139-42	ERJ6RBD471	M.RESISTOR CH 1/10W 470	4	
04502	2SD602A-R	TRANSISTOR	1		R4143	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
04503	2SB710A-R	TRANSISTOR	1		R4144, 45	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	2	
04504-06	2SD602A-R	TRANSISTOR	3		R4146, 47	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
04507	2SB710A-R	TRANSISTOR	1		R4150	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
04508	2SD602A-R	TRANSISTOR	1		R4152	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
04509	2SB710A-R	TRANSISTOR	1		R4154	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
04510-13	2SD602A-R	TRANSISTOR	4		R4156, 57	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
QR4191	UN2213	TRANSISTOR-RESISTOR	1		R4160	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
QR4341, 42	UN2213	TRANSISTOR-RESISTOR	2		R4161	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
QR4381, 82	UN2213	TRANSISTOR-RESISTOR	2		R4162	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4001	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R4164	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4002	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4165	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4003	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4167	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4004	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1		R4168-70	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4005	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4191	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4006	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R4192, 93	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
R4007	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4194	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4008, 09	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2		R4195-97	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4010, 11	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2		R4198	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4016	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4199-01	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	3	
R4017	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4203	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R4018	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4204, 05	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
R4019	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4206, 07	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	
R4020	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4210, 11	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4021	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4213	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4022	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4214, 15	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4023	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4217	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4029, 30	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	2		R4219	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4032	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4221	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4034	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4222	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R4036, 37	ERJ6RBD470	M.RESISTOR CH 1/10W 47	2		R4223	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4040	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R4224	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1	
R4041	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4225	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R4043	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R4226	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R4045	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4227	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1	
R4046, 47	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R4228	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R4048	ERJ6GEYG681	M.RESISTOR CH 1/10W 680	1		R4229	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R4049-55	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	7		R4230	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4061	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R4231	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4062	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4232	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R4063	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4233-36	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4	
R4064	ERJ12YJ621	M.RESISTOR CH 1/2W 620	1		R4237, 38	ERJ6GEYG105	M.RESISTOR CH 1/10W 15K	2	
R4065	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4239, 40	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2	
R4066	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R4241	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4067	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4242	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4068, 69	ERJ6RBD473	M.RESISTOR CH 1/10W 47K	2		R4243	ERJ6RBD150	M.RESISTOR CH 1/10W 15	1	
R4070, 71	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	2		R4244	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1	
R4076	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4245-48	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4	
R4077	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4249	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R4078	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4250-53	ERJ114YJ100	M.RESISTOR CH 1/4W 10	4	
R4079	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4254	ERJ6RBD150	M.RESISTOR CH 1/10W 15	1	
R4080	ERJ6GEYJ335	M.RESISTOR CH 1/10W 3.3M	1		R4255, 56	ERJ114YJ220	M.RESISTOR CH 1/4W 22	2	
R4081	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1		R4257, 58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4082	ERJ6RHD2101	M.RESISTOR CH 1/10W 2.1K	1		R4259	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4083	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R4260, 61	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4089, 90	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	2		R4262	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4092	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4263-66	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4	
					R4267-70	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
					R4281	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4282	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R4407	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4283	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R4408	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R4284	ERJ6RBD301	M.RESISTOR CH 1/10W 300	1		R4409	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4285	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1		R4410	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
R4286	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R4411	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R4287	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1		R4412	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4288	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1		R4413	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
R4289	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R4414	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4290	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		R4415	ERJ6RBD823	M.RESISTOR CH 1/10W 82K	1	
R4291	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4416	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R4292	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1		R4417	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4293-96	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	4		R4418	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4297,98	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2		R4419	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4299,00	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2		R4420	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4301	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1		R4422	ERJ6RBD152	M.RESISTOR CH 1/10W 1.5K	1	
R4302	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R4423	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4303	ERJ6RED150	M.RESISTOR CH 1/10W 15	1		R4424	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R4304	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1		R4425	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1	
R4305-08	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	4		R4426	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R4309	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R4427	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
R4310-13	ERJ14YJ100	M.RESISTOR CH 1/4W 10	4		R4428	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4314	ERJ6RED150	M.RESISTOR CH 1/10W 15	1		R4429	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4315,16	ERJ14YJ220	M.RESISTOR CH 1/4W 22	2		R4431	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4317,18	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4433	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4319	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4434	ERJ6RBD433	M.RESISTOR CH 1/10W 43K	1	
R4320,21	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4435	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R4322	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4436	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4323-26	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	4		R4437	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4327-30	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	4		R4439	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4341,42	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4441	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4343	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4442-44	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R4344	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4445	ERJ6RBD202	M.RESISTOR CH 1/10W 2K	1	
R4345	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R4446	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R4346	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R4447	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4347-50	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	4		R4448	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4351,52	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4449	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4353	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4450	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4355	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4451	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4357,58	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R4461	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
R4359	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4462	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R4360	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4463	ERJ6RBD271	M.RESISTOR CH 1/10W 270	1	
R4362-64	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R4464	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
R4365	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R4465	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	1	
R4366	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4466	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4367	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4467	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R4368	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4468	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1	
R4369	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R4470	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
R4371,72	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R4472	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R4374	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R4473	ERJ6RBD123	M.RESISTOR CH 1/10W 12K	1	
R4375	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4474	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R4376	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R4475	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R4377	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4476	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R4381,82	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2		R4477	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1	
R4383	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R4478	ERJ6RED124	M.RESISTOR CH 1/10W 120K	1	
R4384	ERJ6GEYJ100	M.RESISTOR CH 1/10W 10	1		R4479	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R4385	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4480	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
R4386	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1		R4481	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1	
R4387	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1		R4482-84	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R4388	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4485	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4389	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4486	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R4390	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4487,88	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R4391,92	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R4489	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R4393	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4491,92	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R4394	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4493	ERJ6RBD183	M.RESISTOR CH 1/10W 18K	1	
R4395,96	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		R4494	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
R4397	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R4495	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
R4398	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R4501	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4399	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4502	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R4400	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R4503,04	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2	
R4401	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4505	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4402	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R4506	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R4403	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R4507	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1	
R4404	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1		R4508	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R4405	ERJ6GEYF124	M.RESISTOR CH 1/10W 120K	1		R4509	ERJ6GEYF333	M.RESISTOR CH 1/10W 33K	1	
R4406	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R4510	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R4511	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1		C5014, 15	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
R4512	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		C5016, 17	ECUX1H122KBN	C.CAPACITOR CH 50V 1200P	2	
R4513	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		C5018, 19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
R4514	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		C5020	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
R4515	ERJ6GEYG220	M.RESISTOR CH 1/10W 22	1		C5021-29	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	9	
R4516, 17	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	2		C5101-04	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
R4518	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		C5105	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
R4519	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		C5107	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
R4520	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		C5108, 09	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
R4521	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1		C5111-16	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	6	
R4522, 23	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		C5117	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
R4524	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		C5118-25	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	8	
R4525, 26	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2		C5126, 27	ECUX1H122KBN	C.CAPACITOR CH 50V 1200P	2	
R4527	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		C5128	ECUX1H102JCN	C.CAPACITOR CH 50V 1000P	1	
R4528	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		C5129-37	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	9	
R4529	ERJ6GEYG180	M.RESISTOR CH 1/10W 18	1		C5202-11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	10	
R4530, 31	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	2		C5213-15	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
R4532	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	1		C5217-19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
R4533	ERJ6GEYG180	M.RESISTOR CH 1/10W 18	1		C5220	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
R4534	ERJ6GEYJ1R0	M.RESISTOR CH 1/10W 1	1		C5223-30	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	8	
R4535	ERJ6GEYF123	M.RESISTOR CH 1/10W 12K	1		C5231	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
R4551, 52	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		C5232, 33	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
R4553, 54	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		C5234	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
R4555-62	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8		C5235	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
SW4001	VSS0126	SWITCH	1		C5236	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
SW4061	VSS0126	SWITCH	1		C5238-40	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
SW4381	VSS0367-04B	SWITCH	1		C5241	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
SW4382	VSS0342	SWITCH	1		C5242-47	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	6	
T4501	VLT0866	TRANSFORMER	1		C5249, 50	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
T4502	VLT0868	TRANSFORMER	1		C5251, 52	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	2	
T4503, 04	VLT0867	TRANSFORMER	2		C5253	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
TG4121, 22	VJR0646	TEST POINT	2		C5254	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
TG4191, 92	VJR0646	TEST POINT	2		C5256	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
TG4461	VJR0646	TEST POINT	1		C5258-62	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	5	
TG4501	VJR0646	TEST POINT	1		C5266	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
TP4121-26	VJR0646	TEST POINT	6		C5401-03	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
TP4191-93	VJR0646	TEST POINT	3		C5405-11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	7	
TP4221	VJR0646	TEST POINT	1		C5413-16	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
TP4281	VJR0646	TEST POINT	1		C5418, 19	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
TP4381-83	VJR0646	TEST POINT	3		C5420	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
TP4501, 02	VJR0646	TEST POINT	2		C5423-32	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	10	
VR4002	VRV0112B103	V.RESISTOR 10K	1		C5433	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	1	
VR4062	VRV0112B103	V.RESISTOR 10K	1		C5434	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
VR4221	VRV0112B103	V.RESISTOR 10K	1		C5435	ECUM1H821JCN	C.CAPACITOR CH 50V 820P	1	
VR4281	VRV0112B103	V.RESISTOR 10K	1		C5436	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
VR4341	VRV0112B103	V.RESISTOR 10K	1		C5437	ECUM1C104KBN	C.CAPACITOR CH 16V 0.1U	1	
VR4381	VRV0112B103	V.RESISTOR 10K	1		C5438	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1	
VR4382	VRV00648503	V.RESISTOR 50K	1		C5439-41	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
VR4383	VRV0112B502	V.RESISTOR 5K	1		C5442	ECUM1H680JCN	C.CAPACITOR CH 50V 68P	1	
VR4384	VRV0112B103	V.RESISTOR 10K	1		C5443-52	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	10	
VR4385	VRV0112B203	V.RESISTOR 20K	1		C5453, 54	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	2	
VR4501	VRV0112B104	V.RESISTOR 100K	1		C5455	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
		MISCELLANEOUS			C5456, 57	ECUM1H152KBN	C.CAPACITOR CH 50V 1500P	2	
	VML2143	CARD PULLER	1		C5460-64	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	5	
	VML2144	CARD PULLER	1		C5466	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5601-04	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
■ E9	VEP85048A	H3 EQ P.C. BOARD	1	(RTL) FOR AJ-D450P	C5605	ECUM1H040CCN	C.CAPACITOR CH 50V 4P	1	
C5001-04	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4		C5606-09	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C5005, 06	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	2		C5611	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
C5008, 09	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		C5613, 14	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
C5011, 12	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2		C5619-22	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
C5013	ECUM1C105ZFN	C.CAPACITOR CH 16V 1U	1		C5625	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5627	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5630	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5631	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
					C5633-36	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
					C5638	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5643	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1	
					C5701-05	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	5	
					C5710, 11	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
					C5715, 16	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
					C5801, 02	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	2	
					C5806-09	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	4	
					C5811-13	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	3	
					C5818	ECUM1H100DCN	C.CAPACITOR CH 50V 10P	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C5819, 20	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		IC5602	NJM084M	IC	1	
C5822	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5603	CXD23020	IC	1	
C5901, 02	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		IC5701	MB88344PFV	IC	1	
C5904	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5702	NJM084M	IC	1	
C5909	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5703	NJM082BM	IC	1	
C5912	ECEVOJV330Q	E. CAPACITOR CH6.3V 33U	1		IC5801, 02	74F04SJ	IC	2	
C5913	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5803	74F08SJ	IC	1	
C5951	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5805	74F15TASJ	IC	1	
C5952	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		IC5806	74F15TASJ	IC	1	
C5953	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		IC5807	MC10H124M	IC	1	
C5954	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1		IC5810	TC7S32F	IC	1	
C5955-57	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3		IC5901	T160G22-1225	IC	1	
C5958	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1		IC5902	TC7W08F	IC	1	
C5959, 60	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		IC5903	S80727ANDQ	IC	1	
C5961	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1		IC5951-54	XC62AP3002P	IC	4	
C5962, 63	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		IC5955, 56	AN78M05F	IC	2	
C5964	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1		IC5957, 58	AN79M05F	IC	2	
C5965, 66	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		IC5959	NJM78L09UA	IC	1	
C5967	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1						
C5968, 69	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		L5701	VL00163J100	COIL	10UH	1
C5970	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		L5801	VL00163J8R2	COIL	8.2UH	1
C5971, 72	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		L5802	VL00163J2R7	COIL	2.7UH	1
C5973	ECEVOJV470Q	E. CAPACITOR CH6.3V 47U	1		L5951-53	VLP0133	COIL		3
C5974	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1						
C5975	ECEA1AGE471	E. CAPACITOR 10V 470U	1		P5951	VJP3454B096	CONNECTOR (MALE)		1
C5976	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		P5952	VJP1231R	CONNECTOR (MALE)		1
C5977, 78	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		P5953	VJP1231T	CONNECTOR (MALE)	4P	1
C5979	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1						
C5980	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		Q5001	XN5531	TRANSISTOR-RESISTOR		1
C5981-83	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	3		Q5002	2SC2295-C	TRANSISTOR		1
C5984	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		Q5003	XN5531	TRANSISTOR-RESISTOR		1
C5985	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		Q5004-12	2SC2295-C	TRANSISTOR		9
C5986	ECEVICV470Q	E. CAPACITOR CH 16V 47U	1		Q5101	XN5531	TRANSISTOR-RESISTOR		1
C5987, 88	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2		Q5102	2SC2295-C	TRANSISTOR		1
C5989	ECEVEV100Q	E. CAPACITOR CH 25V 10U	1		Q5103	XN5531	TRANSISTOR-RESISTOR		1
C5990	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		Q5104-10	2SC2295-C	TRANSISTOR		7
C5991	ECEVICV220Q	E. CAPACITOR CH 16V 22U	1		Q5202, 03	2SC2295-C	TRANSISTOR		2
C5992	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		Q5204	2SA1022-C	TRANSISTOR		1
C5995, 96	ECEA1CGE470	E. CAPACITOR 16V 47U	2		Q5401-03	2SC2295-C	TRANSISTOR		3
					Q5404	2SA1022-C	TRANSISTOR		1
D5001	MA3020	DIODE	1		Q5601, 02	2SC2295-C	TRANSISTOR		2
D5101	MA3020	DIODE	1		Q5603	XN5531	TRANSISTOR-RESISTOR		1
D5201	MA3036-H	DIODE	1		Q5606-08	2SC2295-C	TRANSISTOR		3
D5401	MA3036-H	DIODE	1						
D5402	MA3030-H	DIODE	1		QR5101	UN2213	TRANSISTOR-RESISTOR		1
D5403	MA3033-L	DIODE	1		QR5401, 02	UN2213	TRANSISTOR-RESISTOR		2
D5901	MA152K	DIODE	1						
D5951-62	MA701A	DIODE	12						
					R5004	ERJ6GEYG101	M. RESISTOR CH 1/10W	100	1
FL5951-55	VLF1016A470	FILTER	5		R5006	ERJ6GEYG101	M. RESISTOR CH 1/10W	100	1
					R5007	ERJ6GEYG221	M. RESISTOR CH 1/10W	220	1
IC5001	AN3730FA	IC	1		R5008-11	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	4
IC5101	M52055FP	IC	1		R5012	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	1
IC5102	AN3730FA	IC	1		R5013, 14	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	2
IC5201	TC7S32F	IC	1		R5015	ERJ6GEYG221	M. RESISTOR CH 1/10W	220	1
IC5202	MC14053BF	IC	1		R5016	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	1
IC5203	NJM319M	IC	1		R5018	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5204	NJM082BM	IC	1		R5019	ERJ6GEYG391	M. RESISTOR CH 1/10W	390	1
IC5205	TC7SH32F	IC	1		R5020-22	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	3
IC5206	NJM084M	IC	1		R5023	ERJ6GEYG391	M. RESISTOR CH 1/10W	390	1
IC5207	AN3740FAP	IC	1		R5025	ERJ6GEYG121	M. RESISTOR CH 1/10W	120	1
IC5208	MC74HC4066F	IC	1		R5026, 27	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	2
IC5209	NJM082BM	IC	1		R5028	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5401	NJM082BM	IC	1		R5029	ERJ6GEYG121	M. RESISTOR CH 1/10W	120	1
IC5402	TC7W08F	IC	1		R5030	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5403	TC7S32F	IC	1		R5031	ERJ6GEYG181	M. RESISTOR CH 1/10W	180	1
IC5404	MC14053BF	IC	1		R5032	ERJ6GEYG152	M. RESISTOR CH 1/10W	1.5K	1
IC5405	NJM082BM	IC	1		R5033	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5406	NJM084M	IC	1		R5034	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	1
IC5407	NJM319M	IC	1		R5035, 36	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	2
IC5408	AN3740FAP	IC	1		R5037	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	1
IC5409	MC74HC4066F	IC	1		R5038	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5410	NJM082BM	IC	1		R5039	ERJ6GEYG222	M. RESISTOR CH 1/10W	2.2K	1
IC5411	T74LCX244F	IC	1		R5040	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1
IC5601	UPC1663G-E1	IC	1		R5041	ERJ6GEYG102	M. RESISTOR CH 1/10W	1K	1
					R5042	ERJ6GEYG470	M. RESISTOR CH 1/10W	47	1

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R5043	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R5244	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5044	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5245	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R5045	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R5246	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5046, 47	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R5247	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5048	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5248	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5049	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5249	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R5050	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R5250	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5051	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5251	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5052	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5252	ERJ6GEYG680	M.RESISTOR CH 1/10W 68	1	
R5053	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5253	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R5054	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5255	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R5101, 02	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R5256	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5103	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R5257	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R5104, 05	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		R5258	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5106	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1		R5259	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1	
R5107	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R5262	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R5108-11	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	4		R5263	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5112	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R5264	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R5114, 15	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5265	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1	
R5116	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5266	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R5117	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5267	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5118	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5269	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1	
R5119	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5270	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5120	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R5271	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5121	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5273	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5122	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	1		R5277	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5124	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5281	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5125	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5283, 84	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5126	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1		R5288	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5127	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5290	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1	
R5128, 29	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5291	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R5131	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1		R5292, 93	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R5132	ERJ6GEYG181	M.RESISTOR CH 1/10W 180	1		R5302, 03	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
R5133	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1		R5401, 02	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5134	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		R5410, 11	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R5135, 36	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5413	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5137	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5414	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5138	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5415	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1	
R5139	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5416	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5141	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R5417	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5142	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R5418	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5143	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5419	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R5144	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5420	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R5145	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5421	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5146	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5422	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5147, 48	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5425	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5149	ERJ6GEYG122	M.RESISTOR CH 1/10W 1.2K	1		R5426	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	1	
R5150, 51	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R5429	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5152	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5430	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5206	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5431	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5208	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5432	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5210	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5433	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5211	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5434	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5212	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		R5435	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5214	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5436	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5215	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R5437	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5216	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5438, 39	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R5217	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R5440	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5218	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5441	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5219	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5442	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5220	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5445	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5222, 23	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5446	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5225	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5447	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5227	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5449	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5229	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5450	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5230	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5451	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5231, 32	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R5452	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	
R5233	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5453	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5234	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5454	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5235	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5455	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5238	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5456	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
R5239	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5457	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R5240	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5458	ERJ6GEYG680	M.RESISTOR CH 1/10W 68	1	
R5242	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5459	ERJ6GEYG224	M.RESISTOR CH 1/10W 220K	1	
R5243	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R5461	ERJ6GEYG821	M.RESISTOR CH 1/10W 820	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R5462	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R5724	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R5463	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R5729	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R5464	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5730	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R5465	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1		R5736	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R5468	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R5737, 38	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5469	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5801	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
R5470	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		R5802	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5471	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R5807, 08	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R5472	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R5809	ERDS2T0	C.RESISTOR 1/4W 0	1	
R5474	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5811-13	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	3	
R5475	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R5818-25	ERJ6GEYG391	M.RESISTOR CH 1/10W 390	8	
R5476	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5830-33	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	4	
R5478	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5835	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R5479	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5837-39	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	3	
R5480	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5840	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
R5483	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R5845	ERJ6GEYF561	M.RESISTOR CH 1/10W 560	1	
R5488	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R5864	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1	
R5490, 91	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5866, 67	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R5494	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5901-03	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3	
R5496	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5905	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5497	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		R5906	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R5498	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R5907, 08	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R5499, 00	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R5909	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5501	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R5910	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1	
R5502	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5911	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
R5504, 05	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		R5912	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5508	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5914-16	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	3	
R5509	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5917, 18	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R5510	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5921	ERDS2TJ470	C.RESISTOR 1/4W 47	1	
R5601	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		SW5801	VSS0367-04B	SWITCH	1	
R5602	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1						
R5603	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1						
R5604, 05	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		TG5101	VJR0646	TEST POINT	1	
R5606	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		TG5201	VJR0646	TEST POINT	1	
R5607	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		TG5401	VJR0646	TEST POINT	1	
R5608, 09	ERJ6GEYG151	M.RESISTOR CH 1/10W 150	2		TG5801	VJR0646	TEST POINT	1	
R5610	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1						
R5612, 13	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2		TP5001, 02	VJR0646	TEST POINT	2	
R5614, 15	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	2		TP5101, 02	VJR0646	TEST POINT	2	
R5616	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		TP5201-04	VJR0646	TEST POINT	4	
R5618	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		TP5401-05	VJR0646	TEST POINT	5	
R5620	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		TP5601, 02	VJR0646	TEST POINT	2	
R5621	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		TP5801, 02	EYF6CU	TEST POINT	2	
R5622	ERJ6GEYG271	M.RESISTOR CH 1/10W 270	1		TP5901	VJR0646	TEST POINT	1	
R5623	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1						
R5624	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1		VR5210	VRV0109B203	V.RESISTOR 20K	1	
R5627	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	1		VR5410	VRV0109B203	V.RESISTOR 20K	1	
R5629	ERJ6GEYG680	M.RESISTOR CH 1/10W 68	1		VR5601	VRV0109B102	V.RESISTOR 1K	1	
R5631	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1		VR5801	VRV0113B501	V.RESISTOR 500	1	
R5632	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1						
R5634	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1				MISCELLANEOUS		
R5635	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1						
R5639	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		VML2143	CARD PULLER		1	
R5640	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1		VML2144	CARD PULLER		1	
R5646	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1						
R5647	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1						
R5650	ERJ6GEYG750	M.RESISTOR CH 1/10W 75	1						
R5654	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1						
R5656	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R5659	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1						
R5663	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		■ E10	VEP85049A	H4 RF AMP P.C. BOARD	1 (RTL)	
R5664	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1						
R5667	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1						
R5674	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		C5003-12	ECEV1CV4700	E.CAPACITOR CH 16V 47U	10	
R5675, 76	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2		C5013	ECEV0JV1010	E.CAPACITOR CH6.3V 100U	1	
R5701-03	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	3		C5014	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1	
R5704-06	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		C5020, 21	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	2	
R5707	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		C5022, 23	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2	
R5708	ERJ6GEYG273	M.RESISTOR CH 1/10W 27K	1		C5024, 25	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	2	
R5710	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		C5026, 27	ECEV1CV4700	E.CAPACITOR CH 16V 47U	2	
R5711	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		C5052-54	ECUM1H221JCN	C.CAPACITOR CH 50V 220P	3	
R5712	ERJ6GEYF822	M.RESISTOR CH 1/10W 8.2K	1		C5057-64	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	8	
R5713, 14	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2		C5066, 67	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
R5717	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		C5069-94	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	26	
R5718	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		C5099, 00	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2	
					C5105-08	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C5110, 11	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC5017	MC14053BF	IC	1	
C5116-33	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	18		IC5020	MC10H116L	IC	1	
C5136	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		IC5021	MC10H102L	IC	1	
C5140, 41	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC5022	MC10131L	IC	1	
C5202, 03	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC5051	UPC1663G-E1	IC	1	
C5206, 07	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC5052	NJM1496M	IC	1	
C5209, 10	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		IC5053	NJM082BM	IC	1	
C5600-07	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	8		IC5054	UPC1663G-E1	IC	1	
C5608	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		IC5055	NJM1496M	IC	1	
C5609-11	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3						
C5612	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1		L5600	VL00188K1R0K	COIL	1.0UH	1
C5613	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		L5601, 02	VL00188KR47K	COIL	0.47UH	2
C5614	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1		L5603, 04	VL00188J101	COIL	100UH	2
C5615	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		L5605, 06	VL00163KR39	COIL	0.39UH	2
C5617	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1		L5700-02	VL00188K1R0K	COIL	1.0UH	3
C5618, 19	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		L5703, 04	VL00188J101	COIL	100UH	2
C5620, 21	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		L5705, 06	VL00188KR39M	COIL	0.39UH	2
C5622	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1						
C5624	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1		P5001	VJP3454B096	CONNECTOR (MALE)		1
C5626	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		P5002	VJP1230T	CONNECTOR (MALE)	3P	1
C5628	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1		P5003	VJP1230G	CONNECTOR (MALE)	3P	1
C5630, 31	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		P5004	VJP1230T	CONNECTOR (MALE)	3P	1
C5632	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		P5005	VJP1230G	CONNECTOR (MALE)	3P	1
C5633-36	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	4						
C5637, 38	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2		Q5001	2SD601A-R	TRANSISTOR		1
C5639, 40	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		Q5002	2SB709A-R	TRANSISTOR		1
C5643-45	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		Q5006, 07	2SA1022-C	TRANSISTOR		2
C5646, 47	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		Q5008	2SD601A-R	TRANSISTOR		1
C5648-58	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	11		Q5600	XN6537	TRANSISTOR-RESISTOR		1
C5659	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		Q5601, 02	2SC2295-C	TRANSISTOR		2
C5660	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1		Q5603	XN5531	TRANSISTOR-RESISTOR		1
C5661-63	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		Q5604	2SC3130	TRANSISTOR		1
C5665	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		Q5605	XN5531	TRANSISTOR-RESISTOR		1
C5670	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		Q5606, 07	2SK508K512	TRANSISTOR		2
C5671	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	1		Q5608	2SC3130	TRANSISTOR		1
C5700-07	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	8		Q5609, 10	2SD1979	TRANSISTOR		2
C5708	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		Q5611-13	2SC3130	TRANSISTOR		3
C5709-11	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		Q5614, 15	2SK508K512	TRANSISTOR		2
C5713	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	1		Q5616-19	XN5531	TRANSISTOR-RESISTOR		4
C5714	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1		Q5620, 21	2SC3130	TRANSISTOR		2
C5715	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		Q5700	XN6537	TRANSISTOR-RESISTOR		1
C5717	ECUM1H473KBN	C. CAPACITOR CH 50V 0.047U	1		Q5701, 02	2SC2295-C	TRANSISTOR		2
C5718, 19	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		Q5703	XN5531	TRANSISTOR-RESISTOR		1
C5720, 21	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		Q5704	2SC3130	TRANSISTOR		1
C5722	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1		Q5705	XN5531	TRANSISTOR-RESISTOR		1
C5724	ECUM1H560JCN	C. CAPACITOR CH 50V 56P	1		Q5706, 07	2SK508K512	TRANSISTOR		2
C5726	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1		Q5708	2SC3130	TRANSISTOR		1
C5728	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1		Q5709, 10	2SD1979	TRANSISTOR		2
C5730, 31	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2		Q5711-13	2SC3130	TRANSISTOR		3
C5732	ECUM1H470JCN	C. CAPACITOR CH 50V 47P	1		Q5714, 15	2SK508K512	TRANSISTOR		2
C5733-36	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	4		Q5716-19	XN5531	TRANSISTOR-RESISTOR		4
C5737, 38	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	2		Q5720	2SC3130	TRANSISTOR		1
C5739, 40	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	2						
C5743-45	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	3		R5001	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		1
C5746, 47	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2		R5003	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		1
C5748-58	ECUM1E1042FN	C. CAPACITOR CH 25V 0.1U	11		R5010, 11	ERJ6GEYG470	M. RESISTOR CH 1/10W 47		2
C5759	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1		R5012, 13	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		2
C5760	ECUM1H182KBN	C. CAPACITOR CH 50V 1800P	1		R5015	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		1
					R5018, 19	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		2
D5001	MA153	DIODE	1		R5020	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K		1
D5002	MA152WK	DIODE	1		R5021	ERJ6GEYG683	M. RESISTOR CH 1/10W 68K		1
					R5022-26	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		5
FL5002-05	VLF0931	FILTER	4		R5040	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K		1
					R5041, 42	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		2
IC5002	MC74HC32AF	IC	1		R5043	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K		1
IC5003	MC74HC04AF	IC	1		R5044	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K		1
IC5004	NJM082BM	IC	1		R5046-48	ERJ6GEYG101	M. RESISTOR CH 1/10W 100		3
IC5005	MC74HC86AF	IC	1		R5049, 50	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		2
IC5006, 07	TC4S66F	IC	2		R5051	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K		1
IC5008	NJM082BM	IC	1		R5052-54	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		3
IC5009	MC14053BF	IC	1		R5055	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K		1
IC5010	AN7805F	IC	1		R5056	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K		1
IC5011	AN7905F	IC	1		R5057	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		1
IC5013	MB88344PFV	IC	1		R5058	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K		1
IC5014-16	NJM082BM	IC	3		R5059, 60	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K		2

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R5061	ERJ6GEYG562	M.RESISTOR CH 1/10W 5.6K	1		R5632	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R5062	ERJ6GEYG392	M.RESISTOR CH 1/10W 3.9K	1		R5633	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5063-65	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	3		R5634	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5069-80	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	12		R5635	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R5081	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R5637, 38	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5082	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		R5639, 40	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	2	
R5083, 84	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2		R5642, 43	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R5085	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5644	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5086	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R5645	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5087	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1		R5646, 47	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5088, 89	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	2		R5648	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5090	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5649	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5091	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5650, 51	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5092, 93	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R5652	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5094	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R5653	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1	
R5095	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R5654, 55	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5096	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5656, 57	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	2	
R5097, 98	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R5658, 59	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	2	
R5099	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R5660	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	1	
R5100	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1		R5661	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1	
R5111	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5662	ERJ6RBD221	M.RESISTOR CH 1/10W 220	1	
R5112	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R5663	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1	
R5113	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1		R5664-66	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	3	
R5114, 15	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R5667, 68	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5116	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5669, 70	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R5117	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1		R5671, 72	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R5118	ERJ6RBD272	M.RESISTOR CH 1/10W 2.7K	1		R5673, 74	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5119, 20	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2		R5675, 76	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R5122	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	1		R5677, 78	ERJ6RBD391	M.RESISTOR CH 1/10W 390	2	
R5130-33	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	4		R5679, 80	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	2	
R5140-45	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	6		R5681, 82	ERJ6RED470	M.RESISTOR CH 1/10W 47	2	
R5146	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5683, 84	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5148	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1		R5685, 86	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R5149	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R5687, 88	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
R5150	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R5689	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5151	ERJ6RBD223	M.RESISTOR CH 1/10W 22K	1		R5690	ERJ6GEYG182	M.RESISTOR CH 1/10W 1.8K	1	
R5153	ERJ6RBD562	M.RESISTOR CH 1/10W 5.6K	1		R5691	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5154	ERJ6RBD333	M.RESISTOR CH 1/10W 33K	1		R5692	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5155	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R5693-96	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	4	
R5156	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5697	ERJ6RBD821	M.RESISTOR CH 1/10W 820	1	
R5161	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R5698	ERJ6RBD102	M.RESISTOR CH 1/10W 1K	1	
R5171, 72	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R5699-02	ERJ6GEYG560	M.RESISTOR CH 1/10W 56	4	
R5200, 01	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R5703	ERJ6RBD822	M.RESISTOR CH 1/10W 8.2K	1	
R5202-05	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	4		R5704	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1	
R5206, 07	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R5705	ERJ6RBD332	M.RESISTOR CH 1/10W 3.3K	1	
R5208-10	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	3		R5706, 07	ERJ6RBD392	M.RESISTOR CH 1/10W 3.9K	2	
R5211, 12	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	2		R5708	ERJ6RBD153	M.RESISTOR CH 1/10W 15K	1	
R5214, 15	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2		R5709	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R5216, 17	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	2		R5710	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5218, 19	ERJ6GEYJ820	M.RESISTOR CH 1/10W 82	2		R5711-15	ERJ6GEYOR00	M.RESISTOR CH 1/10W 0	5	
R5230	ERJ6GEYG153	M.RESISTOR CH 1/10W 15K	1		R5717	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5231, 32	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5718	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5600, 01	ERJ6RED470	M.RESISTOR CH 1/10W 47	2		R5719	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R5602	ERJ6RED560	M.RESISTOR CH 1/10W 56	1		R5720	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5603, 04	ERJ6RBD271	M.RESISTOR CH 1/10W 270	2		R5800, 01	ERJ6RED470	M.RESISTOR CH 1/10W 47	2	
R5605	ERJ6RED680	M.RESISTOR CH 1/10W 68	1		R5802	ERJ6RED560	M.RESISTOR CH 1/10W 56	1	
R5606	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1		R5803, 04	ERJ6RBD271	M.RESISTOR CH 1/10W 270	2	
R5607, 08	ERJ6RBD391	M.RESISTOR CH 1/10W 390	2		R5805	ERJ6RBD121	M.RESISTOR CH 1/10W 120	1	
R5609	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1		R5806	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R5610, 11	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5807, 08	ERJ6RBD391	M.RESISTOR CH 1/10W 390	2	
R5612	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1		R5809	ERJ6RBD222	M.RESISTOR CH 1/10W 2.2K	1	
R5613	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1		R5810, 11	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5614	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1		R5812	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R5615	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R5813	ERJ6GEYG272	M.RESISTOR CH 1/10W 2.7K	1	
R5616, 17	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2		R5814	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	1	
R5618, 19	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2		R5815	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R5620, 21	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R5816, 17	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R5622, 23	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2		R5818, 19	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	2	
R5624, 25	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	2		R5820, 21	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R5626	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1		R5822, 23	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	2	
R5627	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R5824, 25	ERJ6GEYG152	M.RESISTOR CH 1/10W 1.5K	2	
R5628	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1		R5826	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	
R5629	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1		R5827	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1	
R5630	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	1		R5828	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1	
R5631	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1		R5829	ERJ6RBD181	M.RESISTOR CH 1/10W 180	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R5830	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R5831	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R5832	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R5833	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R5834	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R5835	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	1	
R5836	ERJ6RBD101	M. RESISTOR CH 1/10W 100	1	
R5837	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R5838	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R5839, 40	ERJ6RBD151	M. RESISTOR CH 1/10W 150	2	
R5842, 43	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R5844	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R5845	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R5846, 47	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5848	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R5849	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
R5850, 51	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5852	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R5853	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	1	
R5854, 55	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5856, 57	ERJ6GEYG331	M. RESISTOR CH 1/10W 330	2	
R5858, 59	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R5860	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R5861	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	1	
R5862	ERJ6RBD221	M. RESISTOR CH 1/10W 220	1	
R5863	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	1	
R5864-66	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	3	
R5867, 68	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5869, 70	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R5871, 72	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R5873, 74	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5875, 76	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R5877, 78	ERJ6RBD391	M. RESISTOR CH 1/10W 390	2	
R5879, 80	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	2	
R5881, 82	ERJ6RED470	M. RESISTOR CH 1/10W 47	2	
R5883, 84	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5885, 86	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R5887, 88	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
R5889	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
R5890	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	1	
R5891	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R5892	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R5893-96	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	4	
R5897	ERJ6RBD821	M. RESISTOR CH 1/10W 820	1	
R5898	ERJ6RBD102	M. RESISTOR CH 1/10W 1K	1	
R5899-02	ERJ6GEYG560	M. RESISTOR CH 1/10W 56	4	
R5903	ERJ6RBD822	M. RESISTOR CH 1/10W 8.2K	1	
R5904	ERJ6RBD391	M. RESISTOR CH 1/10W 390	1	
R5905	ERJ6RBD332	M. RESISTOR CH 1/10W 3.3K	1	
R5906, 07	ERJ6RBD392	M. RESISTOR CH 1/10W 3.9K	2	
R5908	ERJ6RBD153	M. RESISTOR CH 1/10W 15K	1	
R5909	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R5910	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R5911-14	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	4	
R5920	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
RY5001	VSY2069	RELAY	1	
SS5008	VJS1990	CONNECTOR (FEMALE)	1	
SW5008	VJP2536A003	CONNECTOR (MALE)	1	
TG5001-03	VJR0646	TEST POINT	3	
TG5005-09	VJR0646	TEST POINT	5	
TP5001-03	VJR0646	TEST POINT	3	
TP5007-12	VJR0646	TEST POINT	6	
TP5015-20	VJR0646	TEST POINT	6	
VC5600, 01	ECV12W20X53T	TRIMMER	2	
VC5700, 01	ECV12W20X53T	TRIMMER	2	
VR5013, 14	VRV0112B502	V. RESISTOR 5K	2	
		MISCELLANEOUS		

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
	VML2143	CARD PULLER	1	
	VML2144	CARD PULLER	1	
	VSC3626	HEAT SINK (A)	2	
	XNG26EFXS	NUT	2	
	XYN26+F10	SCREW	2	
■ E11	VEP85151A	HEAD BUFF P.C. BOARD	1 (RTL)	
C5001	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C5002	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C5003	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C5004	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C5005	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C5006	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C5007	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C5008	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C5009	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1	
C5010	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1	
C5011-14	ECEV1EM4R70	E. CAPACITOR CH 25V 4.7U	4	
C5015, 16	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2	
C5017-20	ECEV1HV2R20	E. CAPACITOR CH 50V 2.2U	4	
C5021, 22	ECEV1CV1000	E. CAPACITOR CH 16V 10U	2	
C5050-60	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	11	
C5061, 62	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	2	
C5063-66	ECUX1H822KBV	C. CAPACITOR CH 50V 8200P	4	
C5100-03	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	4	
C5200-03	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	4	
C5300-02	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	3	
C5303	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C5304	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C5305	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C5306	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C5307, 08	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	2	
C5350-52	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	3	
C5353	ECUX1H220JCV	C. CAPACITOR CH 50V 22P	1	
C5354	ECUX1H181JCV	C. CAPACITOR CH 50V 180P	1	
C5355	ECUX1H030CCV	C. CAPACITOR CH 50V 3P	1	
C5356	ECUX1H180JCV	C. CAPACITOR CH 50V 18P	1	
C5357, 58	ECUX1H080DCV	C. CAPACITOR CH 50V 8P	2	
C5400	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C5401-05	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	5	
C5406, 07	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	2	
C5413-16	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	4	
C5420	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C5421	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C5500	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C5501-05	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	5	
C5506, 07	ECUX1H102KBV	C. CAPACITOR CH 50V 1000P	2	
C5514-16	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	3	
C5520	ECUX1H121JCV	C. CAPACITOR CH 50V 120P	1	
C5521	ECUX1H221JCV	C. CAPACITOR CH 50V 220P	1	
C5600-10	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	11	
C5700-10	ECUX1E104ZPV	C. CAPACITOR CH 25V 0.1U	11	
C5801, 02	ECUX1H150JCV	C. CAPACITOR CH 50V 15P	2	
D5400, 01	MA152WK	DIODE	2	
D5500, 01	MA152WK	DIODE	2	
FL5001-05	VLF1016A470	FILTER	5	
IC5003	MC74HC04AF	IC	1	
IC5008, 09	TC4S66F	IC	2	
IC5010	XC62AP5002P	IC	1	
IC5011	XC62DN5002P	IC	1	
IC5014	NJM0826M	IC	1	
IC5023, 24	MC10H116L	IC	2	
IC5025, 26	TC4S69F	IC	2	
IC5027, 28	TC4S30F	IC	2	
IC5030-33	TC4S30F	IC	4	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
IC5034	XC62DN5002P	IC	1		R5352	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
IC5035	TC4571F	IC	1		R5353	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IC5040-43	TC4530F	IC	4		R5354	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
IC5045	TC4571F	IC	1		R5355	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1	
IC5050	UPC5102GS030	IC	1		R5356	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1	
IC5060	UPC5102GS030	IC	1		R5357	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
L5300, 01	VLQ0163J2R2	COIL 2.2UH	2		R5358	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
L5350, 51	VLQ0163J2R2	COIL 2.2UH	2		R5359, 60	ERJ8GCGY101	M. RESISTOR CH 1/8W 100	2	
L5400, 01	VLQ0163J330	COIL 33UH	2		R5361	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
L5500, 01	VLQ0163J330	COIL 33UH	2		R5362	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1	
P5001	VJS3375B060	CONNECTOR (FEMALE)	1		R5363	ERJ8GCGYJ270	M. RESISTOR CH 1/8W 27	1	
P5002	VJS3900C013	CONNECTOR (FEMALE)	1		R5364	ERJ6GEYG563	M. RESISTOR CH 1/10W 56K	1	
P5003	VJS3900C010	CONNECTOR (FEMALE)	1		R5400, 01	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2	
Q5200, 01	2SA1022-C	TRANSISTOR	2		R5402-04	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
Q5300	2SD601A-R	TRANSISTOR	1		R5405-08	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	4	
Q5301	2SB709A-R	TRANSISTOR	1		R5409-13	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	5	
Q5302, 03	2SC3735B35	TRANSISTOR	2		R5414	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q5350	2SD601A-R	TRANSISTOR	1		R5415	ERJ8GCGYJ221	M. RESISTOR CH 1/8W 220	1	
Q5351	2SB709A-R	TRANSISTOR	1		R5416	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q5352, 53	2SC3735B35	TRANSISTOR	2		R5417	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
Q5400	2SA1022-C	TRANSISTOR	1		R5419	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
Q5401-04	2SD1979	TRANSISTOR	4		R5420, 21	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	2	
Q5405, 06	2SC2954	TRANSISTOR	2		R5424, 25	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
Q5407, 08	2SC3130	TRANSISTOR	2		R5426	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
Q5409	2SC2954	TRANSISTOR	1		R5427	ERJ6GEYG151	M. RESISTOR CH 1/10W 150	1	
Q5410, 11	2SA1022-C	TRANSISTOR	2		R5428	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
Q5412, 13	2SK508-B	TRANSISTOR	2		R5429	ERJ6GEYG151	M. RESISTOR CH 1/10W 150	1	
Q5500	2SA1022-C	TRANSISTOR	1		R5430	ERJ12YJ270	M. RESISTOR CH 1/2W 270	1	
Q5501-04	2SD1979	TRANSISTOR	4		R5431	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
Q5505, 06	2SC2954	TRANSISTOR	2		R5432, 33	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	2	
Q5507, 08	2SC3130	TRANSISTOR	2		R5434	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
Q5509	2SC2954	TRANSISTOR	1		R5435	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q5510, 11	2SA1022-C	TRANSISTOR	2		R5440	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
Q5512, 13	2SK508-B	TRANSISTOR	2		R5500, 01	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	2	
Q5600, 01	XN5531	TRANSISTOR-RESISTOR	2		R5502-04	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	3	
Q5700, 01	XN5531	TRANSISTOR-RESISTOR	2		R5505-08	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	4	
R5100	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		R5509-13	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	5	
R5101, 02	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	2		R5514	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R5103	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	1		R5515	ERJ8GCGYJ221	M. RESISTOR CH 1/8W 220	1	
R5104, 05	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	2		R5516	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R5106-09	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	4		R5517	ERJ6GEYG152	M. RESISTOR CH 1/10W 1.5K	1	
R5200, 01	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R5519	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R5202	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1		R5520, 21	ERJ6GEYG272	M. RESISTOR CH 1/10W 2.7K	2	
R5203, 04	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R5524, 25	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R5205	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1		R5526	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R5206	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1		R5527	ERJ6GEYG151	M. RESISTOR CH 1/10W 150	1	
R5207, 08	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R5528	ERJ6GEYG821	M. RESISTOR CH 1/10W 820	1	
R5209	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1		R5529	ERJ6GEYG151	M. RESISTOR CH 1/10W 150	1	
R5210, 11	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2		R5530	ERJ12YJ270	M. RESISTOR CH 1/2W 270	1	
R5212	ERJ6GEYG562	M. RESISTOR CH 1/10W 5.6K	1		R5531	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R5213	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1		R5532, 33	ERJ6GEYG182	M. RESISTOR CH 1/10W 1.8K	2	
R5214	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1		R5534	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R5215, 16	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	2		R5535	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R5217	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R5540	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R5218	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1		R5600	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1	
R5219, 20	ERJ6GEYG471	M. RESISTOR CH 1/10W 470	2		R5601, 02	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5221	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1		R5603, 04	ERJ6GEYG391	M. RESISTOR CH 1/10W 390	2	
R5300	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1		R5605, 06	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
R5302	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1		R5607, 08	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5303	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		R5609, 10	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R5304	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		R5611, 12	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
R5305	ERJ6GEYG392	M. RESISTOR CH 1/10W 3.9K	1		R5613, 14	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
R5306	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1		R5615-18	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	4	
R5307	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1		R5700	ERJ6GEYJ100	M. RESISTOR CH 1/10W 10	1	
R5308	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1		R5701, 02	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5309, 10	ERJ8GCGY101	M. RESISTOR CH 1/8W 100	2		R5703, 04	ERJ6GEYG121	M. RESISTOR CH 1/10W 120	2	
R5311	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1		R5705	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
R5312	ERJ6GEYG122	M. RESISTOR CH 1/10W 1.2K	1		R5706	ERJ6GEYG153	M. RESISTOR CH 1/10W 15K	1	
R5313	ERJ8GCGYJ270	M. RESISTOR CH 1/8W 27	1		R5707, 08	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
R5314	ERJ6GEYG563	M. RESISTOR CH 1/10W 56K	1		R5709, 10	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	2	
R5350	ERJ6GEYG154	M. RESISTOR CH 1/10W 150K	1		R5711, 12	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	2	
					R5713, 14	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	2	
					R5715-18	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	4	
					TG5001, 02	VJR0646	TEST POINT	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
TP5001-04	VJR0646	TEST POINT	4		P1	VJP3375A060	CONNECTOR (MALE)	1	
		MISCELLANEOUS			01	2SA1022-C	TRANSISTOR	1	
	VMP5846	RF ANGLE	1		02	2SC2295-C	TRANSISTOR	1	
	VY01745	RF SHIELD CASE (UPPER)	1		03	2SA1022-C	TRANSISTOR	1	
	VSC4386	RF SHIELD CASE (MIDDLE)	1		04	2SC2295-C	TRANSISTOR	1	
	XTV3+6FFR	SCREW	2		05	2SA1022-C	TRANSISTOR	1	
	VSC4437	RF SHIELD CASE (LOWER)	1		06	2SC2295-C	TRANSISTOR	1	
	VMZ2588	RF BARRIER	1		07	2SA1022-C	TRANSISTOR	1	
	VEE9862	CABLE	1		08	2SC2295-C	TRANSISTOR	1	
					09	2SA1022-C	TRANSISTOR	1	
					010	2SC2295-C	TRANSISTOR	1	
					011	2SB709A-R	TRANSISTOR	1	
					012, 13	2SD601A-R	TRANSISTOR	2	
					014	2SB709A-R	TRANSISTOR	1	
					015, 16	2SD601A-R	TRANSISTOR	2	
					017	2SB709A-R	TRANSISTOR	1	
■ E12	VEP80991A	AC HEAD I/F P.C. BOARD	1	(RTL)	018, 19	2SD601A-R	TRANSISTOR	2	
					020	2SB709A-R	TRANSISTOR	1	
P1	VJP2278	CONNECTOR (MALE)	1		021, 22	2SD601A-R	TRANSISTOR	2	
P2	VJP1881T	CONNECTOR (MALE)	1		023	2SB709A-R	TRANSISTOR	1	
					024, 25	2SD601A-R	TRANSISTOR	2	
					026	2SB709A-R	TRANSISTOR	1	
					027, 28	2SD601A-R	TRANSISTOR	2	
					R1	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R2	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R3	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
					R4	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
					R5, R6	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
					R7	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
					R8	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
					R9	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R10	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R11	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
					R12	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
					R13, 14	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
					R15	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
					R16	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
					R17	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R18	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R19	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
					R20	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
					R21, 22	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
					R23	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
					R24	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
					R25	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R26	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R27	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
					R28	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
					R29, 30	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
					R31	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
					R32	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
					R33	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R34	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R35	ERJ6GEYJ334	M. RESISTOR CH 1/10W 330K	1	
					R36	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
					R37, 38	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
					R39	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
					R40	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
					R41, 42	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
					R43	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R44	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R45, 46	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
					R47	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R48-50	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
					R51	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R52	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R53, 54	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
					R55	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
					R56-58	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
					R59	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R60	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R61, 62	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
					R63	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
D1-D5	MA152K	DIODE	5						
D6-11	MA3130-L	DIODE	6						
IC1	NJM78L09UA	IC	1						
IC2	NJM79L09UA	IC	1						
IC3	NJM78L09UA	IC	1						
IC4	NJM79L09UA	IC	1						
IC5	NJM78L09UA	IC	1						
IC6	NJM79L09UA	IC	1						
IC209	NJM78L09UA	IC	1						
IC210	NJM79L09UA	IC	1						
J1, J2	VJS3902	CONNECTOR (FEMALE)	2						
J3	VJS3901	CONNECTOR (FEMALE)	1						
J4, J5	VJS3902	CONNECTOR (FEMALE)	2						
J14	VJP3414A009	CONNECTOR (MALE)	1						
J16	VJP3414A015	CONNECTOR (MALE)	1						
J17	VJP3414A025	CONNECTOR (MALE)	1						
L1	VLQEL05F101J	COIL 100UH	1						

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks	Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R64-66	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3		IC203	SN74S1051NS	IC	1	
R67	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1		IC205, 06	MC14094BF	IC	2	
R68	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		IC207	MC14050BF	IC	1	
R69, 70	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2		IC208	MC14049UBF	IC	1	
R71	ERJ6RED750	M. RESISTOR CH 1/10W 75	1		IC209	NUM78L09UA	IC	1	
R72-74	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3		IC210	NUM79L09UA	IC	1	
R75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1						
R76	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		J2, J3	VJS3901	CONNECTOR (FEMALE)	2	
R77, 78	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2		J4, J5	VJS3902	CONNECTOR (FEMALE)	2	
R79	ERJ6RED750	M. RESISTOR CH 1/10W 75	1		J14	VJP3414A009	CONNECTOR (MALE)	1	
R80-82	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3		J16	VJP3414A015	CONNECTOR (MALE)	1	
R83	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1		J17	VJP3414A025	CONNECTOR (MALE)	1	
R84	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1						
R85, 86	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2		L1	VLQEL05F101J	COIL 100UH	1	
R87	ERJ6RED750	M. RESISTOR CH 1/10W 75	1						
R88	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1		P1	VJP3375A060	CONNECTOR (MALE)	1	
SW1, W2	VSS0307	SWITCH	2						
		MISCELLANEOUS							
	VMP5684	P. C. BOARD ANGLE	1		Q9	2SA1022-C	TRANSISTOR	1	
	VMP4866	D SUB ANGLE	1		Q10	2SC2295-C	TRANSISTOR	1	
	VX00102	SCREW	6		Q11	2SB709A-R	TRANSISTOR	1	
	XTN26+6FFZ	SCREW	4		Q12, 13	2SD601A-R	TRANSISTOR	2	
	XTN3+10JFZ	SCREW	5		Q14	2SB709A-R	TRANSISTOR	1	
	XYE3+EF8	SCREW	2		Q15, 16	2SD601A-R	TRANSISTOR	2	
					Q17	2SB709A-R	TRANSISTOR	1	
					Q18, 19	2SD601A-R	TRANSISTOR	2	
					Q20	2SB709A-R	TRANSISTOR	1	
					Q21, 22	2SD601A-R	TRANSISTOR	2	
					Q23	2SB709A-R	TRANSISTOR	1	
					Q24, 25	2SD601A-R	TRANSISTOR	2	
					Q26	2SB709A-R	TRANSISTOR	1	
					Q27, 28	2SD601A-R	TRANSISTOR	2	
					Q201-12	UN2214	TRANSISTOR-RESISTOR	12	
■ E13	VEP83417C	V/S JACK P. C. BOARD	1	(RTL) FOR AJ-D440P/D440E					
C1, C2	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R33	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
C4	ECA1CX5470	E. CAPACITOR 16V 47U	1		R34	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
C5, C6	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R35	ERJ6GEYG334	M. RESISTOR CH 1/10W 330K	1	
C8	ECA1CX5470	E. CAPACITOR 16V 47U	1		R36	ERJ6GEYG332	M. RESISTOR CH 1/10W 3.3K	1	
C9, 10	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R37, 38	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	2	
C11	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R39	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
C12, 13	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R40	ERJ6GEYG330	M. RESISTOR CH 1/10W 33	1	
C14	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R41, 42	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	2	
C15, 16	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R43	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
C17	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R44	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
C18, 19	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R45, 46	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
C20	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R47	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
C21, 22	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R48-50	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
C23	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R51	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
C24, 25	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R52	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
C26	ECUX1H270JCV	C. CAPACITOR CH 50V 27P	1		R53, 54	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
C27	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R55	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
C28, 29	ECA1CX5470	E. CAPACITOR 16V 47U	2		R56-58	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
C30	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R59	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
C31, 32	ECA1CX5470	E. CAPACITOR 16V 47U	2		R60	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
C33-38	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	6		R61, 62	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
C50, 51	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R63	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
C203	ECUM1H331JCN	C. CAPACITOR CH 50V 330P	1		R64-66	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
C204-27	ECUX1H102JCN	C. CAPACITOR CH 50V 1000P	24		R67	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
C240-42	ECA1CX5100	E. CAPACITOR 16V 10U	3		R68	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
C243	ECA1CX5470	E. CAPACITOR 16V 47U	1		R69, 70	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
C244	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R71	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
C250-57	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	8		R72-74	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
					R75	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R76	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R77, 78	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
D5	MA152K	DIODE	1		R79	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
D6-11	MA3130-L	DIODE	6		R80-82	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	3	
D201, 02	MA152K	DIODE	2		R83	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
					R84	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
IC1	NUM78L09UA	IC	1		R85, 86	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
IC2	NUM79L09UA	IC	1		R87	ERJ6RED750	M. RESISTOR CH 1/10W 75	1	
IC3	NUM78L09UA	IC	1		R88	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
IC4	NUM79L09UA	IC	1		R201, 02	ERJ6GEYG682	M. RESISTOR CH 1/10W 6.8K	2	
IC5	NUM78L09UA	IC	1		R203	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
IC6	NUM79L09UA	IC	1		R204	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1	
IC201, 02	MC14021BF	IC	2		R205	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R206	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1		1 L3	ELF18D608	FILTER	1	
R207	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	1		P1	VJP2638	CONNECTOR (MALE)	1	
R208	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1		P3	VJP2639	CONNECTOR (MALE)	1	
R209-32	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	24		P4	VJP2824A007	CONNECTOR (MALE)	1	
R241	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1		P5	VJP3080	CONNECTOR (MALE)	1	
R242	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1		Q2, Q3	2SD893	TRANSISTOR	2	
R243	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	1		Q4	UN1111	TRANSISTOR-RESISTOR	1	
1 R244	ER012HJ2R7	F. RESISTOR 1/2W 2.7	1		Q5	2SD1991A-Q	TRANSISTOR	1	
R251-55	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	5		1 R1	ERC12AGM334	S. RESISTOR 1/2W 330K	1	
SW2	VSS0307	SWITCH	1		R2	ERDS2FJ682	C. RESISTOR 1/4W 6.8K	1	
		MISCELLANEOUS			R3	ERDS2FJ102	C. RESISTOR 1/4W 1K	1	
	VMP5684	P. C. BOARD ANGLE	1		R4	ER62SJ471	M. RESISTOR 2W 470	1	
	VMP4866	D SUB ANGLE	1		1 R5	ERU5TEJ100	F. RESISTOR 5W 10	1	
	VX00102	SCREW	6		R6	ER63SJ101	M. RESISTOR 3W 100	1	
	XTN26+6FFZ	SCREW	4		R7, R8	ERDS2FJ684	C. RESISTOR 1/4W 680K	2	
	XTN3+10JFZ	SCREW	4		R9	ERDS1TJ220	C. RESISTOR 1/2W 22	1	
	XYE3+EF8	SCREW	2		R10	ERDS2FJ104	C. RESISTOR 1/4W 100K	1	
					R11	EROS2CKF4700	M. RESISTOR 1/4W 470	1	
					R12, 13	ERDS2FJ104	C. RESISTOR 1/4W 100K	2	
					R14, 15	ERDS1TJ394	C. RESISTOR 1/2W 390K	2	
					R16	ERDS1TJ220	C. RESISTOR 1/2W 22	1	
■ E14	VEP81074A	POWER 1 P.C. BOARD	1	(RTL) FOR AJ-D450P/D440E	R17	EROS2CKF4700	M. RESISTOR 1/4W 470	1	
					R18, 19	ERDS2FJ105	C. RESISTOR 1/4W 1M	2	
					R20	ERDS1TJ470	C. RESISTOR 1/2W 47	1	
1 C1, C2	ECOU2A224M	P. CAPACITOR 100V 0.22U	2		R22	ERDS1TJ334	C. RESISTOR 1/2W 330K	1	
1 C3, C4	VCK0260M332A	C. CAPACITOR 3300P	2		R23, 24	ERDS1TJ104	C. RESISTOR 1/2W 100K	2	
1 C5	VCK0260M102A	C. CAPACITOR 1000P	1		R25	ERDS2FJ333	C. RESISTOR 1/4W 33K	1	
C7, C8	ECEC2EB681E	E. CAPACITOR 250V 680U	2		R26	ERDS2FJ473	C. RESISTOR 1/4W 47K	1	
C9, 10	ECA1HXLV220	E. CAPACITOR 50V 22U	2		R27	ERDS2FJ563	C. RESISTOR 1/4W 56K	1	
C11	ECA1HXLV010	E. CAPACITOR 50V 1U	1		R28	EROS2CKF4701	M. RESISTOR 1/4W 4.7K	1	
C12	ECOB1H332JF	P. CAPACITOR 50V 3300P	1		R29	ERDS2FJ221	C. RESISTOR 1/4W 220	1	
C13	ECA1HXLV010	E. CAPACITOR 50V 1U	1		R30	EROS2CKF2700	M. RESISTOR 1/4W 270	1	
C14	ECOB1H104JF	P. CAPACITOR 50V 0.1U	1		R31	ERDS1TJ470	C. RESISTOR 1/2W 47	1	
C15	ECOB1H332JF	P. CAPACITOR 50V 3300P	1		R32	ERDS1TJ334	C. RESISTOR 1/2W 330K	1	
C16	ECOP1H4716Z	P. CAPACITOR 50V 470P	1		R33, 34	ERDS1TJ104	C. RESISTOR 1/2W 100K	2	
C17, 18	ECOB1H104JF	P. CAPACITOR 50V 0.1U	2		R36	ERDS2FJ104	C. RESISTOR 1/4W 100K	1	
C19	ECOB1H562JF	P. CAPACITOR 50V 5600P	1		R37	EROS2CKF4701	M. RESISTOR 1/4W 4.7K	1	
C20	ECOB1H104JF	P. CAPACITOR 50V 0.1U	1		R38	ERDS2FJ221	C. RESISTOR 1/4W 220	1	
C21	ECOP1H4716Z	P. CAPACITOR 50V 470P	1		R39	EROS2CKF2700	M. RESISTOR 1/4W 270	1	
C22	ECOB1H562JF	P. CAPACITOR 50V 5600P	1		R40, 41	ERDS1TJ394	C. RESISTOR 1/2W 390K	2	
C23	ECOB1H104JF	P. CAPACITOR 50V 0.1U	1		R42	ERDS2FJ684	C. RESISTOR 1/4W 680K	1	
C26	ECEA1HGE010	E. CAPACITOR 50V 1U	1		R44	ERDS2FJ683	C. RESISTOR 1/4W 68K	1	
C27	ECKF1H332KB	C. CAPACITOR 50V 3300P	1		R46, 47	ERDS2FJ183	C. RESISTOR 1/4W 18K	2	
C28	ECA1CX5100	E. CAPACITOR 16V 10U	1				MISCELLANEOUS		
C29	ECEA2GGE100	E. CAPACITOR 400V 10U	1			VSC3434	SHIELD CASE	1	
C30	ECOV1H105JL	P. CAPACITOR 50V 1U	1			XYN3+6FZS	SCREW	1	
C31	ECOE2A223KF	P. CAPACITOR 100V 0.022U	1		1	VM20965	CAPACITOR COVER	1	
1 C32	ECOU2A683M	P. CAPACITOR 100V 0.068U	1		1	VMZ1608	CAPACITOR COVER	2	
C33	ECOV1H823JL	P. CAPACITOR 50V 0.082U	1		1	VMZ1798	BARRIER	2	
D1	RBV506	DIODE	1		1	VJF0384	CLAMP	1	
D2	AC08FGM	DIODE	1		1	VMZ1356	CAPACITOR COVER	1	
D3	AP01C	DIODE	1						
D4	ERA22-06	DIODE	1						
D10	ERA22-02	DIODE	1						
D12	MA4240-H	DIODE	1						
D13, 14	ERA22-02	DIODE	2						
D15	MA4240-H	DIODE	1						
D17	ERA22-02	DIODE	1		■ E14	VEP81183A	POWER 1 P.C. BOARD	1	(RTL) FOR AJ-D450P/D440E
D18, 19	MA4051	DIODE	2						
D20-22	MA165	DIODE	3		1 C1101	ECOU2A224M	P. CAPACITOR 100V 0.22U	1	
D23, 24	MA4051	DIODE	2		1 C1102, 03	VCK0262K471A	C. CAPACITOR 470P	2	
D25	MA4082H	DIODE	1		1 C1104	ECOU2A474M	P. CAPACITOR 100V 0.47U	1	
D26	MA4051	DIODE	1		1 C1105, 06	VCK0262K101A	C. CAPACITOR 100P	2	
IC1, C2	FA5311P	IC	2		1 C1107, 08	VCK0260M152A	C. CAPACITOR 1500P	2	
IC3	MK1210	IC	1		1 C1109	VCK0260M102A	C. CAPACITOR 1000P	1	
J3	VWJ0119	JUMPER	1		C1110, 11	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
1 L1	ELF18D850P	FILTER	1		C1112	VCK0293	C. CAPACITOR	1	
					C1115, 16	VCK0106K471	C. CAPACITOR 470P	2	
					C1117, 18	ECEC2WC151EB	E. CAPACITOR 450V 150U	2	
					C1119, 20	VCK0106K471	C. CAPACITOR 470P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
C1121	ECA1HXLV100	E. CAPACITOR 50V 10U	1	
C1122	ECA1HXS100	E. CAPACITOR 50V 10U	1	
C1124, 25	ECUM1E4742FM	C. CAPACITOR CH 25V 0.47U	2	
C1126	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
C1127	ECOV1H684JF	P. CAPACITOR 50V 0.68U	1	
C1128	ECA1HF0101	E. CAPACITOR 50V 100U	1	
C1129	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
C1130	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
C1131	ECQF6222JZ	P. CAPACITOR 630V 2200P	1	
C1132, 33	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
C1134	ECUM1H472KBN	C. CAPACITOR CH 50V 4700P	1	
D1101	RBV606	DIODE	1	
D1102	TM1661S-L	DIODE	1	
D1103	U1GU44	DIODE	1	
D1104	FML-36S	DIODE	1	
D1105, 06	ERA15-08	DIODE	2	
D1107, 08	MA3200-M	DIODE	2	
D1110	MA151K	DIODE	1	
D1111-13	U1GU44	DIODE	3	
D1114, 15	MA3068-M	DIODE	2	
D1116	MA3200-M	DIODE	1	
D1117	MA151K	DIODE	1	
IC1101	MC33262P	IC	1	
IC1102	MS1945BL	IC	1	
IC1103	MS1953BL	IC	1	
Δ L1101	ELF18D850C	FILTER	1	
Δ L1102, 03	ELF18D604F	FILTER	2	
L1105	VL00820	COIL	1	
P1101	VJP2638	CONNECTOR (MALE)	1	
P1102, 03	VJP2639	CONNECTOR (MALE)	2	
P1104	VJP4033	CONNECTOR (MALE)	1	
Q1101, 02	2SK1941-R	TRANSISTOR	2	
Q1105	UN2213	TRANSISTOR-RESISTOR	1	
Δ R1101	ERC12AGM334	S. RESISTOR 1/2W 330K	1	
Δ R1102, 03	ERU5TEJ100	F. RESISTOR 5W 10	2	
R1104	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R1105, 06	ERG2SJ220	M. RESISTOR 2W 22	2	
R1107	VRE0206	M. RESISTOR	1	
R1108	ERJ14YJ100	M. RESISTOR CH 1/4W 10	1	
R1109	ERJ14YJ220	M. RESISTOR CH 1/4W 22	1	
R1110	ERJ14YJ100	M. RESISTOR CH 1/4W 10	1	
R1111	ERJ14YJ220	M. RESISTOR CH 1/4W 22	1	
R1112	ERJ14YJ100	M. RESISTOR CH 1/4W 10	1	
R1113	ERJ12YJ473	M. RESISTOR CH 1/10W 47K	1	
R1114	ERJ6GEYF123	M. RESISTOR CH 1/10W 12K	1	
R1115, 16	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	2	
R1117, 18	ERG3SJ333	M. RESISTOR 3W 33K	2	
R1119	ERJ6RBD273	M. RESISTOR CH 1/10W 27K	1	
R1120	ERJ6RBD183	M. RESISTOR CH 1/10W 18K	1	
R1122	ERJ12YJ473	M. RESISTOR CH 1/2W 47K	1	
R1123	ERJ14YJ474	M. RESISTOR CH 1/4W 470K	1	
R1125	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R1127	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R1129	ERJ14YJ474	M. RESISTOR CH 1/4W 470K	1	
R1130	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R1131	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
R1132	ERJ6GEYG470	M. RESISTOR CH 1/10W 47	1	
R1133	ERJ6GEYG390	M. RESISTOR CH 1/10W 39	1	
R1134, 35	ERJ14YJ224	M. RESISTOR CH 1/4W 220K	2	
R1136	ERJ14YJ154	M. RESISTOR CH 1/4W 150K	1	
R1137	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
R1138	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	1	
R1139-41	ERJ12YJ154	M. RESISTOR CH 1/2W 150K	3	
R1142	ERJ6RBD272	M. RESISTOR CH 1/10W 2.7K	1	
R1143, 44	ERJ12YJ224	M. RESISTOR CH 1/2W 220K	2	
R1145	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
R1146	VRT0142	THERMISTOR	1	
R1147	ERG2SJ271	M. RESISTOR 2W 270	1	
R1148-50	ERJ12YJ154	M. RESISTOR CH 1/2W 150K	3	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R1151	ERJ6RBD223	M. RESISTOR CH 1/10W 22K	1	
R1153, 54	ERJ12YJ473	M. RESISTOR CH 1/2W 47K	2	
R1155, 56	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	2	
R1158	ERJ6GEYOR00	M. RESISTOR CH 1/10W 0	1	
R1159	ERJ6GEYG104	M. RESISTOR CH 1/10W 100K	1	
R1160	ERJ6RED224	M. RESISTOR CH 1/10W 220K	1	
R1161	ERJ6RBD104	M. RESISTOR CH 1/10W 100K	1	
R1162	ERJ6RED334	M. RESISTOR CH 1/10W 330K	1	
R1163	ERJ6GEYG474	M. RESISTOR CH 1/10W 470K	1	
R1165	ERJ6GEYG273	M. RESISTOR CH 1/10W 27K	1	
R1166	ERJ6GEYG102	M. RESISTOR CH 1/10W 1K	1	
VR1102	VRV0109B501	V. RESISTOR 500	1	
		MISCELLANEOUS		
Δ	VMZ0965	CAPACITOR COVER	3	
Δ	VMZ1608	CAPACITOR COVER	4	
	VSC4708	HEAT SINK (A)	1	
	XYE3+EF8	SCREW	2	
	XYN3+F6FZS	SCREW	1	
	XYN3+F8	SCREW	5	
	XYN3+F10	SCREW	1	
	VJR1008	EARTH LUG	3	
	VJF1348	CLAMPER	1	
■ E15	VEP81075A	POWER 2 P.C. BOARD	1	(RTL)FOR AJ-D450P/D440
C40, 41	EEUFA1A682E	E. CAPACITOR 10V 6800P	2	
C42	ECA1VF0102	E. CAPACITOR 35V 1000U	1	
C43	EEUFA1E472E	E. CAPACITOR 25V 4700P	1	
C44	EEUFA1C272E	E. CAPACITOR 16V 2700P	1	
C45	EEUFA1C102E	E. CAPACITOR 16V 1000P	1	
C46	EEUFA1E681E	E. CAPACITOR 25V 680P	1	
C47, 48	ECA1CXL101	E. CAPACITOR 16V 100U	2	
C49	ECEA1VGE471	E. CAPACITOR 35V 470U	1	
C50	ECATEXLV101	E. CAPACITOR 25V 100U	1	
C51-53	ECA1CXL101	E. CAPACITOR 16V 100U	3	
C54-56	ECOB1H104JF	P. CAPACITOR 50V 0.1U	3	
C59	ECOB1H104JF	P. CAPACITOR 50V 0.1U	1	
C60	ECKFH1H121KB	C. CAPACITOR 50V 120P	1	
C61	VCK0106K151	C. CAPACITOR 150P	1	
C62	VCK0106K221	C. CAPACITOR 220P	1	
C63	ECA1VXLV470	E. CAPACITOR 35V 47U	1	
C64	VCK0106K151	C. CAPACITOR 150P	1	
C65	VCK0106K221	C. CAPACITOR 220P	1	
C66	ECA1VXLV470	E. CAPACITOR 35V 47U	1	
C67, 68	ECOE6473KF	P. CAPACITOR 630V 0.047U	2	
C69	ECKD2H101KB	C. CAPACITOR 500V 100P	1	
C70-75	ECKFH1H101KB	C. CAPACITOR 50V 100P	6	
C76-78	EEUFA1A822E	E. CAPACITOR 10V 8200P	3	
C79	ECKFH1H121KB	C. CAPACITOR 50V 120P	1	
C80, 81	ECOB1H222JF	P. CAPACITOR 50V 2200P	2	
C82	ECQV1H823JL	P. CAPACITOR 50V 0.082U	1	
D30	D30SC4M	DIODE	1	
D31	FML12SP	DIODE	1	
D32	RL4ZP	DIODE	1	
D33	FML-G12SP	DIODE	1	
D34	FMB-G14L	DIODE	1	
D35	31D004	DIODE	1	
D36	RL2ZP	DIODE	1	
D37, 38	MA4075	DIODE	2	
D39	MA4300-L	DIODE	1	
D40	MA4160-L	DIODE	1	
D41, 42	MA4130H	DIODE	2	
D43	MA4160-L	DIODE	1	
D44, 45	ERA22-06	DIODE	2	
D46	AP01C	DIODE	1	
D47	ERA22-02	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D48	MA4240-H	DIODE	1		■ E15	VEP81184B	POWER 2 P.C.BOARD	1	(RTL)FOR AJ-D450E/D440E
D49	AP01C	DIODE	1						
D50	ERA22-02	DIODE	1		C1002,03	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	2	
D51	MA4240-H	DIODE	1		C1004-07	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
IC11,12	UPC1093J-T	IC	2		C1008	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	1	
L12	VL00479	COIL	1		C1009,10	ECA1HXLV220	E. CAPACITOR 50V 22U	2	
L13	VL00605	COIL	1		C1011	ECA1HXLV010	E. CAPACITOR 50V 1U	1	
L14	VL00354	COIL	1		C1012	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1	
L15	VL00605	COIL	1		C1013	ECA1HXLV010	E. CAPACITOR 50V 1U	1	
L16	VL00354	COIL	1		C1015	ECUM1H332KBN	C. CAPACITOR CH 50V 3300P	1	
L17,18	VL00655K220	COIL	2		C1016	ECU1H471GB	P. CAPACITOR 50V 470P	1	
L19-22	VLP0074	COIL	4		C1017	ECUM1H104KBN	C. CAPACITOR CH 50V 0.1U	1	
P11	VJP2824B003	CONNECTOR (MALE)	1		C1018	ECUM1E104KBM	C. CAPACITOR CH 25V 0.1U	1	
P12	VJP2824B006	CONNECTOR (MALE) 6P	1		C1019	ECUM1H562KBN	C. CAPACITOR CH 50V 5600P	1	
P13	VJP2824B008	CONNECTOR (MALE)	1		C1020	ECUM1H104KBN	C. CAPACITOR CH 50V 0.1U	1	
P14	VJP1243T	CONNECTOR (MALE) 3P	1		C1021	ECU1H471GB	P. CAPACITOR 50V 470P	1	
Q11,12	2SK1684	TRANSISTOR	2		C1022	ECUM1H562KBN	C. CAPACITOR CH 50V 5600P	1	
Q13-16	PS2561L1-1	PHOTO CUPLER	4		C1023	ECUM1E104KBM	C. CAPACITOR CH 25V 0.1U	1	
Q18	UN1214	TRANSISTOR-RESISTOR	1		C1024	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
Q19	UN1114	TRANSISTOR-RESISTOR	1		C1026	ECUM1E474ZFM	C. CAPACITOR CH 25V 0.47U	1	
R50	ERG2SJ470	M. RESISTOR 2W 47	1		C1027,28	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	2	
R51,52	ERDS2FJ183	C. RESISTOR 1/4W 18K	2		C1040,41	EEUFA1A332L	E. CAPACITOR 10V 3300U	2	
R53	ERDS2CKF1801	M. RESISTOR 1/4W 1.8K	1		C1042	EEUFA1V471	E. CAPACITOR 35V 470U	1	
R54	ERG2SJ470	M. RESISTOR 2W 47	1		C1043	EEUFA1E332	E. CAPACITOR 25V 3300U	1	
R55	VRT0033	THERMISTOR	1		C1044,45	EEUFA1C222LE	E. CAPACITOR 16V 2200P	2	
R56	ERDS2TJ331	C. RESISTOR 1/4W 330	1		C1046	EEUFA1E681E	E. CAPACITOR 25V 680P	1	
R57	ERDS2TJ103	C. RESISTOR 1/4W 10K	1		C1047,48	ECA1CXL101	E. CAPACITOR 16V 100U	2	
R58	ERDS2CKF3601	M. RESISTOR 1/4W 3.6K	1		C1049	ECA1VHG471	E. CAPACITOR 35V 100U	1	
R59	ERDS2CKF4700	M. RESISTOR 1/4W 470	1		C1050	ECA1EXLV101	E. CAPACITOR 25V 100U	1	
R60	ERDS2TJ103	C. RESISTOR 1/4W 10K	1		C1051-53	ECA1CXL101	E. CAPACITOR 16V 100U	3	
R63	ERDS2TJ221	C. RESISTOR 1/4W 220	1		C1054	ECUM1E104KBM	C. CAPACITOR CH 25V 0.1U	1	
R64	ERG2SJ681	M. RESISTOR 2W 680	1		C1055	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
R65	ERG2SJ221	M. RESISTOR 2W 220	1		C1056	ECUM1E104KBM	C. CAPACITOR CH 25V 0.1U	1	
R66	ERDS2TJ331	C. RESISTOR 1/4W 330	1		C1059	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
R67	ERDS2TJ221	C. RESISTOR 1/4W 220	1		C1060	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
R68	ERDS2TJ103	C. RESISTOR 1/4W 10K	1		C1062	VCK0106K151	C. CAPACITOR 150P	1	
R69	ERDS2CKF6801	M. RESISTOR 1/4W 6.8K	1		C1063	ECA1VXLV470	E. CAPACITOR 35V 47U	1	
R70	ERDS2CKF1601	M. RESISTOR 1/4W 1.6K	1		C1065	VCK0106K151	C. CAPACITOR 150P	1	
R71	ERDS2TJ103	C. RESISTOR 1/4W 10K	1		C1066	ECA1VXLV470	E. CAPACITOR 35V 47U	1	
R72	ERG3SJ393	M. RESISTOR 3W 39K	1		C1067,68	ECOE6473KF	P. CAPACITOR 630V 0.047U	2	
R73	ERG2SJ180	M. RESISTOR 2W 18	1		C1069-75	ECKD2H101KB	C. CAPACITOR 500V 100P	7	
R74	ERDS2FJ100	C. RESISTOR 1/4W 10	1		C1076-78	EEUFA1A822E	E. CAPACITOR 10V 8200P	3	
R75	ERDS2FJ104	C. RESISTOR 1/4W 100K	1		C1079	ECUM1H121JCN	C. CAPACITOR CH 50V 120P	1	
R76	ERW1PKR33	M. RESISTOR 1W 0.33	1		C1080,81	ECUM1H222KBN	C. CAPACITOR CH 50V 2200P	2	
R77	ERG3SJ393	M. RESISTOR 3W 39K	1		C1083	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
R78	ERG2SJ180	M. RESISTOR 2W 18	1		C1085	EEUFA1C222LE	E. CAPACITOR 16V 2200P	1	
R79	ERDS2FJ100	C. RESISTOR 1/4W 10	1		C1086	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
R80	ERDS2FJ104	C. RESISTOR 1/4W 100K	1		C1087	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
R81	ERW1PKR33	M. RESISTOR 1W 0.33	1		C1088	EEUFA1A822E	E. CAPACITOR 10V 8200P	1	
T1	VLT0860	TRANSFORMER	1		C1089	ECA1HXS100	E. CAPACITOR 50V 10U	1	
T2	VLT0861	TRANSFORMER	1		C1090-93	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	4	
VR1,R2	VRV0112B501	V. RESISTOR 500	2		C1094	ECUM1H102KBN	C. CAPACITOR CH 50V 1000P	1	
		MISCELLANEOUS			C1095	ECUM1E474ZFM	C. CAPACITOR CH 25V 0.47U	1	
	VSC4389	HEAT SINK (A)	1		C1096	ECA1CXL101	E. CAPACITOR 16V 100U	1	
	VSC4390	HEAT SINK (B)	1		C1097,98	ECUM1E474ZFM	C. CAPACITOR CH 25V 0.47U	2	
	XYN3+F8	SCREW	7		C1099	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1	
	VEE9624	REEL DRIVE CABLE	1		D1001	MA151WK	DIODE	1	
	VEE9625	CTL CABLE	1		D1004	MA151K	DIODE	1	
	VMZ2504	INSULATION SHEET	1		D1005	MA151WK	DIODE	1	
	XYN3+C8F2S	SCREW	4		D1007	MA3082-H	DIODE	1	
	XYE3+EF8	SCREW	4		D1008	MA3051-M	DIODE	1	
	VEE0C18	GND CABLE	1		D1009	MA153	DIODE	1	
					D1010	U1GU44	DIODE	1	
					D1011	MA151K	DIODE	1	
					D1012	MA3240-H	DIODE	1	
					D1013,14	U1GU44	DIODE	2	
					D1015	MA3240-H	DIODE	1	
					D1017	U1GU44	DIODE	1	
					D1018,19	MA3051-M	DIODE	2	
					D1020-22	MA151K	DIODE	3	
					D1023,24	MA3051-M	DIODE	2	
					D1030	D30SC4M	DIODE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1031	FML-G12SP	D10DE	1		R1033, 34	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	2	
D1032	RL42P	D10DE	1		R1036	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
D1033, 34	FML-G12SP	D10DE	2		R1037	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1	
D1035	FMB-G14L	D10DE	1		R1038	ERJ6GEYG471	M.RESISTOR CH 1/10W 470	1	
D1036	FML-G12SP	D10DE	1		R1039	ERJ6RBD681	M.RESISTOR CH 1/10W 680	1	
D1037, 38	MA3075-M	D10DE	2		R1040, 41	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	2	
D1039	MA3240-H	D10DE	1		R1042	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
D1040	MA3160-L	D10DE	1		R1043	ERJ6RBD621	M.RESISTOR CH 1/10W 620	1	
D1041, 42	MA3130-L	D10DE	2		R1044	ERJ6RBD391	M.RESISTOR CH 1/10W 390	1	
D1043	MA3160-L	D10DE	1		R1046, 47	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	2	
D1044, 45	U05NU44	D10DE	2		R1048, 49	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
D1046	EG01C	D10DE	1		R1050	ERG2SJ470	M.RESISTOR 2W 47	1	
D1047	U1GU44	D10DE	1		R1051, 52	ERJ6GEYG183	M.RESISTOR CH 1/10W 18K	2	
D1048	MA3240-H	D10DE	1		R1053	ERJ6RBD182	M.RESISTOR CH 1/10W 1.8K	1	
D1049	EG01C	D10DE	1		R1054	ERG2SJ470	M.RESISTOR 2W 47	1	
D1050	U1GU44	D10DE	1		R1055	VRT0142	THERMISTOR	1	
D1051	MA3240-H	D10DE	1		R1056	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
D1052	MA151K	D10DE	1		R1057	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC1001, 02	FA5311BP	IC	2		R1058	ERJ6RBD362	M.RESISTOR CH 1/10W 3.6K	1	
IC1011, 12	UPC1093J-T	IC	2		R1059	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1	
IC1013	UPC393C	IC	1		R1060	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
IC1014	P030RV31	IC	1		R1061	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
J1001	VWJ0121	CABLE	1		R1062	VRT0033	THERMISTOR	1	
L1012	VL00479	COIL	1		R1063	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
L1013	VL00605	COIL	1		R1064, 65	ERG2SJ681	M.RESISTOR 2W 680	2	
L1014	VL00655K220	COIL	1		R1066	ERJ6GEYG331	M.RESISTOR CH 1/10W 330	1	
L1015, 16	VL00605	COIL	2		R1067	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	1	
L1017	VL00354	COIL	1		R1068	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
L1018	VL00655K220	COIL	1		R1069	ERJ6RBD682	M.RESISTOR CH 1/10W 6.8K	1	
L1019	VLP0074	COIL	1		R1070	ERJ6RBD162	M.RESISTOR CH 1/10W 1.6K	1	
L1021, 22	VLP0074	COIL	2		R1071	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
P1011	VJP2824B003	CONNECTOR (MALE)	1		R1072	ERG3SJ333	M.RESISTOR 3W 33K	1	
P1012	VJP2824B009	CONNECTOR (MALE)	1		R1073	ERG2SJ180	M.RESISTOR 2W 18	1	
P1013	VJP2824B008	CONNECTOR (MALE)	1		R1074	ERJ14YJ390	M.RESISTOR 1/4W 39	1	
P1014	VJP1243T	CONNECTOR (MALE)	3P 1		R1075	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
P1015	VJP4033	CONNECTOR (MALE)	1		R1076	ERN1PKR33	M.RESISTOR 1W 0.33	1	
Q1002, 03	2SD1478-R	TRANSISTOR	2		R1077	ERG3SJ333	M.RESISTOR 3W 33K	1	
Q1004	2SB710-R	TRANSISTOR	1		R1078	ERG2SJ180	M.RESISTOR 2W 18	1	
Q1005	UN2213	TRANSISTOR-RESISTOR	1		R1079	ERJ14YJ220	M.RESISTOR CH 1/4W 22	1	
Q1006, 07	2SB709-R	TRANSISTOR	2		R1080	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1	
Q1011, 12	2SK2258-01	TRANSISTOR	2		R1081	ERN1PKR33	M.RESISTOR 1W 0.33	1	
△ Q1013-15	PS2561L1V1WL	TRANSISTOR	3		R1082, 83	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
Q1017	UN2214	TRANSISTOR-RESISTOR	1		R1084	ERJ6RBD132	M.RESISTOR CH 1/10W 1.3K	1	
Q1018	UN2211	TRANSISTOR-RESISTOR	1		R1085, 86	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
Q1019	UN2111	TRANSISTOR-RESISTOR	1		R1087	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
△ Q1020	PS2561L1V1WL	TRANSISTOR	1		R1088	VRE0206	M.RESISTOR	1	
Q1022	UN2113	TRANSISTOR-RESISTOR	1		R1089	ERJ14YJ154	M.RESISTOR CH 1/4W 150K	1	
Q1023	UN2213	TRANSISTOR-RESISTOR	1		R1090	ERJ6RBD122	M.RESISTOR CH 1/10W 1.2K	1	
Q1024	UN2214	TRANSISTOR-RESISTOR	1		R1091, 92	ERJ6RBD103	M.RESISTOR CH 1/10W 10K	2	
R1001-05	ERJ6GEYG121	M.RESISTOR CH 1/10W 120	5		R1093, 94	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
R1006	ERG2SJ681	M.RESISTOR 2W 680	1		R1095	ERX2SZJR10	M.RESISTOR 2W 0.1	1	
R1007, 08	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	2		R1097	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	1	
R1009	ERJ14YJ4R7	M.RESISTOR CH 1/4W 4.7	1		R1098	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
R1010	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	1		R1099	ERG3SJ333	M.RESISTOR 3W 33K	1	
R1011	ERJ6RBD241	M.RESISTOR CH 1/10W 240	1		△ T1001	VLT0899	TRANSFORMER	1	
R1012, 13	ERJ6GEYG104	M.RESISTOR CH 1/10W 100K	2		△ T1002	VLT0900	TRANSFORMER	1	
R1014	ERJ6GEYG154	M.RESISTOR CH 1/10W 150K	1		VR1001, 02	VRV0112B501	V.RESISTOR 500	2	
R1016	ERJ14YJ4R7	M.RESISTOR CH 1/4W 4.7	1				MISCELLANEOUS		
R1017	ERJ6RBD241	M.RESISTOR CH 1/10W 240	1			VLP0336	FERRITE BEAD	8	
R1018, 19	ERJ6GEYJ225	M.RESISTOR CH 1/10W 2.2M	2			VLP0337	AMORPHOUS BEAD	2	
R1020	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1			VLP0394	FERRITE BEAD	3	
R1021	ERG3SJ333	M.RESISTOR 3W 33K	1			VSC4779	HEAT SINK (A)	1	
R1023, 24	ERJ12YJ154	M.RESISTOR CH 1/2W 150K	2			VSC4778	HEAT SINK (F)	1	
R1026	ERJ6GEYG683	M.RESISTOR CH 1/10W 68K	1			XYN34F8	SCREW	13	
R1027	ERJ6GEYG563	M.RESISTOR CH 1/10W 56K	1			XYN34F6	SCREW	2	
R1028	ERJ6RBD472	M.RESISTOR CH 1/10W 4.7K	1			VJR1008	EARTH LUG	2	
R1029	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1			XYN34F10	SCREW	2	
R1030	ERJ6RBD471	M.RESISTOR CH 1/10W 470	1			XVE34EF8	SCREW	4	
R1031	ERJ14YJ100	M.RESISTOR CH 1/4W 10	1			VSC4707	HEAT SINK	1	
					△	VMZ2779	INSULATION	1	
						VEE0C18	POWER GND CABLE	1	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VSC4780	HEAT SINK (D)	1		R2, R3	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	2	
	VMZ2919	BARRIER	2		R4	ERJ3RBD562	M. RESISTOR CH 1/16W 5.6K	1	
					R5	ERJ3RBD473	M. RESISTOR CH 1/16W 47K	1	
					R6	ERJ3RBD562	M. RESISTOR CH 1/16W 5.6K	1	
					R7	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
					R8	ERJ3RBD333	M. RESISTOR CH 1/16W 33K	1	
					R9	ERJ3GEYJ562	M. RESISTOR CH 1/16W 5.6K	1	
■ E16	VEP82216B	MECH I/F P.C. BOARD	1	(RTL)	R10	ERJ3RBD562	M. RESISTOR CH 1/16W 5.6K	1	
					R11	ERJ3RBD473	M. RESISTOR CH 1/16W 47K	1	
					R12, 13	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	2	
C1	ECUX1H561JCV	C. CAPACITOR CH 50V 560P	1		R14	ERJ6RBD104	M. RESISTOR CH 1/10W 100K	1	
C2-C5	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	4		R15	ERJ6RBD823	M. RESISTOR CH 1/10W 82K	1	
C6	ECEV1CV2200	E. CAPACITOR CH 16V 22U	1		R16	ERJ6RBD273	M. RESISTOR CH 1/10W 27K	1	
C7	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R17	ERJ3GEYJ273	M. RESISTOR CH 1/16W 27K	1	
C8	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		R18	ERJ6RBD392	M. RESISTOR CH 1/10W 3.9K	1	
C9, 10	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	2		R19	ERJ6RBD103	M. RESISTOR CH 1/10W 10K	1	
C11	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R20	ERJ3GEYJ102	M. RESISTOR CH 1/16W 1K	1	
C12	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		R21	ERJ6RBD183	M. RESISTOR CH 1/10W 18K	1	
C13, 14	ECEV1CV4700	E. CAPACITOR CH 16V 47U	2		R22	ERJ6RBD473	M. RESISTOR CH 1/10W 47K	1	
C15	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R23	ERJ6RBD682	M. RESISTOR CH 1/10W 6.8K	1	
C20	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R24	ERJ6RBD222	M. RESISTOR CH 1/10W 2.2K	1	
C21	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		R25	ERJ6RBD391	M. RESISTOR CH 1/10W 390	1	
C22	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R36, 37	ERJ3GEYJ0R00	M. RESISTOR CH 1/16W 0	2	
C23	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		R100	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
C100	ECUX1E104ZFV	C. CAPACITOR CH 25V 0.1U	1		R101	ERJ8GCYJ102	M. RESISTOR CH 1/8W 1K	1	
C101	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		R102	ERJ6GEYJ102	M. RESISTOR CH 1/10W 1K	1	
C102	ECA1HEN101	E. CAPACITOR 50V 100U	1		R103	ERJ3GEYJ334	M. RESISTOR CH 1/16W 330K	1	
C103	ECUX1H103KBV	C. CAPACITOR CH 50V 0.01U	1		R104	ERJ3GEYJ223	M. RESISTOR CH 1/16W 22K	1	
C104	ECEV1CV1000	E. CAPACITOR CH 16V 10U	1		R105	ERJ8GCYJ102	M. RESISTOR CH 1/8W 1K	1	
C200-02	ECUX1H101JCV	C. CAPACITOR CH 50V 100P	3		R200	ERJ6GEYJ752	M. RESISTOR CH 1/10W 7.5K	1	
					R201	ERJ6GEYJ242	M. RESISTOR CH 1/10W 2.4K	1	
D1	MA157	DIODE	1		R202	ERJ6GEYJ821	M. RESISTOR CH 1/10W 820	1	
D100-02	MA738	DIODE	3		R203	ERJ6GEYJ752	M. RESISTOR CH 1/10W 7.5K	1	
					R204	ERJ6GEYJ242	M. RESISTOR CH 1/10W 2.4K	1	
					R205	ERJ6GEYJ821	M. RESISTOR CH 1/10W 820	1	
IC1, C2	OP177GS	IC	2		SW200	VSS023706	SWITCH	1	
IC3	NJM4580ED	IC	1						
IC4-C6	UPC4558G2	IC	3		VR1	EVMECSA00B24	V. RESISTOR 20K	1	
IC10	NJM78L09UA	IC	1		VR2	EVMECSA00B54	V. RESISTOR 50K	1	
IC11	NJM79L09UA	IC	1						
IC100	MC14538BF	IC	1						
L1, L2	VLF1016A470	FILTER	2						
L100	VLP0133	COIL	1						
P1	VJP2891A030	CONNECTOR (MALE)	1		■ E17	VEP80856A	CARRIGE P.C. BOARD	1	(RTL)
P2	VJP3418A080	CONNECTOR (MALE)	1						
P11	VJP3172D002	CONNECTOR (MALE)	1						
P12	VJP3172D005	CONNECTOR (MALE)	1		P1	VJP1249T	CONNECTOR (MALE) 9P	1	
P13	VJP3172D002	CONNECTOR (MALE)	1		P2	VJS2889A012	CONNECTOR (FEMALE)	1	
P14	VJP3172D003	CONNECTOR (MALE)	1		P3	VJS2889A016	CONNECTOR (FEMALE)	1	
P15	VJP3518B002	CONNECTOR (MALE)	1						
P16	VJP3518B003	CONNECTOR (MALE)	1						
P17	VJS3801B010	CONNECTOR (FEMALE)	1		R1-R7	ERDS2TJ221	C. RESISTOR 1/4W 220	7	
P18	VJP3518B002	CONNECTOR (MALE)	1						
P19	VJP3172D002	CONNECTOR (MALE)	1						
P20	VJP3518B003	CONNECTOR (MALE)	1						
P21	VJP3518B002	CONNECTOR (MALE)	1						
P22	VJP3172D004	CONNECTOR (MALE)	1						
P24	VJP3518B002	CONNECTOR (MALE)	1						
P25	VJP1230T	CONNECTOR (MALE) 3P	1		■ E18	VEP84291A	A JACK P.C. BOARD	1	(RTL) FOR AJ-D450P/D450E
P26	VJP1236T	CONNECTOR (MALE) 9P	1						
P30	VJP3172D003	CONNECTOR (MALE)	1						
P32	VJP3172D004	CONNECTOR (MALE)	1		C1, C2	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
P33	VJS3406B015	CONNECTOR (FEMALE)	1		C7, C8	ECUM1H103ZFN	C. CAPACITOR CH 50V 0.01U	2	
P34, 35	VJS2889A017	CONNECTOR (FEMALE)	2		C101	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
P36	VJS3406B019	CONNECTOR (FEMALE)	1		C102	ECA1CXS470	E. CAPACITOR 16V 47U	1	
P41	VJP3172D002	CONNECTOR (MALE)	1		C103	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1	
P48	VJP3125B002	CONNECTOR (MALE)	1		C104	ECA1CXS470	E. CAPACITOR 16V 47U	1	
					C105-08	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	4	
O1	2SB1218A-R	TRANSISTOR	1		C109	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
O100, O1	2SB766-R	TRANSISTOR	2		C110	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
					C111	ECUM1H101JCN	C. CAPACITOR CH 50V 100P	1	
QR100, O1	UN2214	TRANSISTOR-RESISTOR	2		C112	ECUM1H270JCN	C. CAPACITOR CH 50V 27P	1	
					C113-17	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	5	
R1	ERJ3GEYJ821	M. RESISTOR CH 1/16W 820	1		C121, 22	ECUM1H330JCN	C. CAPACITOR CH 50V 33P	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
D1,D2	MA152K	DIODE	2		C7,C8	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2	
D3,D4	MA3130-L	DIODE	2		C101	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
IC1	NJM78L09UA	IC	1		C102	ECA1CX5470	E.CAPACITOR 16V 47U	1	
IC2	NJM79L09UA	IC	1		C103	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1	
J1,J2	VJS3417	CONNECTOR (FEMALE)	2		C104	ECA1CX5470	E.CAPACITOR 16V 47U	1	
J7,J8	VJP3417	CONNECTOR (MALE)	2		C105-08	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	4	
P1	VJP3375A060	CONNECTOR (MALE)	1		C109	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
P2	VJP3094	CONNECTOR (MALE)	1		C110	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
Q1	2SA1022-C	TRANSISTOR	1		C111	ECUM1H101JCN	C.CAPACITOR CH 50V 100P	1	
Q2	2SC2295-C	TRANSISTOR	1		C112	ECUM1H270JCN	C.CAPACITOR CH 50V 27P	1	
Q3	2SA1022-C	TRANSISTOR	1		C113-17	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	5	
Q5	2SB709A-R	TRANSISTOR	1		C121,22	ECUM1H330JCN	C.CAPACITOR CH 50V 33P	2	
Q6,Q7	2SD601A-R	TRANSISTOR	2		D1,D2	MA152K	DIODE	2	
Q8	2SB709A-R	TRANSISTOR	1		D3,D4	MA3130-L	DIODE	2	
Q9,10	2SD601A-R	TRANSISTOR	2		IC1	NJM78L09UA	IC	1	
Q11	UN2112	TRANSISTOR-RESISTOR	1		IC2	NJM79L09UA	IC	1	
Q12	2SD601A-R	TRANSISTOR	1		J7,J8	VJP3417	CONNECTOR (MALE)	2	
Q13	UN2213	TRANSISTOR-RESISTOR	1		P1	VJP3375A060	CONNECTOR (MALE)	1	
R2	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		P2	VJP3094	CONNECTOR (MALE)	1	
R4	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q1	2SA1022-C	TRANSISTOR	1	
R6	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q2	2SC2295-C	TRANSISTOR	1	
R8	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q3	2SA1022-C	TRANSISTOR	1	
R26	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q5	2SB709A-R	TRANSISTOR	1	
R28	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q6,Q7	2SD601A-R	TRANSISTOR	2	
R30	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q8	2SB709A-R	TRANSISTOR	1	
R32	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		Q9,10	2SD601A-R	TRANSISTOR	2	
R101	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		Q11	UN2112	TRANSISTOR-RESISTOR	1	
R103	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1		Q12	2SD601A-R	TRANSISTOR	1	
R104	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		Q13	UN2213	TRANSISTOR-RESISTOR	1	
R105,06	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2		R2	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R107	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1		R4	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R108	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1		R6	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R109	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		R8	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R110	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R26	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R111	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1		R28	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R112	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1		R30	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R116	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1		R32	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
R117,18	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R101	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R119	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R103	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R120	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R104	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R121,22	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2		R105,06	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	2	
R123	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R107	ERJ6GEYG102	M.RESISTOR CH 1/10W 1K	1	
R124	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		R108	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R125,26	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2		R109	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R127	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R110	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R128	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R111	ERJ6GEYJ334	M.RESISTOR CH 1/10W 330K	1	
R129,30	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2		R112	ERJ6GEYG332	M.RESISTOR CH 1/10W 3.3K	1	
R131	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		R116	ERJ6GEYG330	M.RESISTOR CH 1/10W 33	1	
R132	ERJ6RED750	M.RESISTOR CH 1/10W 75	1		R117,18	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R133	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1		R119	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
R134,35	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		R120	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R136	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1		R121,22	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	
R137	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1		R123	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
R138	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1		R124	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
R139	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1		R125,26	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	2	
R140	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1		R127	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
		MISCELLANEOUS			R128	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
	VMP4867	XLR GUIDE ANGLE (A)	1		R129,30	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	2	
	XYN26+F8	SCREW	2		R131	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
					R132	ERJ6RED750	M.RESISTOR CH 1/10W 75	1	
					R133	ERJ6GEYG682	M.RESISTOR CH 1/10W 6.8K	1	
					R134,35	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
					R136	ERJ6GEYG105	M.RESISTOR CH 1/10W 1M	1	
					R137	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
					R138	ERJ6GEYF393	M.RESISTOR CH 1/10W 39K	1	
E18	VEP84291E	A JACK P.C. BOARD	1	(RTL)FOR AJ-D440P/D440E	R139	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C1,C2	ECUM1H103ZFN	C.CAPACITOR CH 50V 0.01U	2		R140	ERJ6GEYG470	M.RESISTOR CH 1/10W 47	1	
							MISCELLANEOUS		

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
	VMP4867	XLR GUIDE ANGLE (A)	1		C31, 32	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
	XYN26+F8	SCREW	2		C33	ECEV1CN1000	E. CAPACITOR CH 16V 10U	1	
					C34, 35	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	2	
					C36	ECEV1CN1000	E. CAPACITOR CH 16V 10U	1	
					C40	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1	
					D1	LN28RCPP	LED	1	
					D2-D5	LN38GCPP	LED	4	
■ E19	VEP80A12A	SUB JACK P.C. BOARD	1	(RTL) FOR AJ-D450P/D450E	D7-14	MA152WK	DIODE	8	
					D15-18	MA152K	DIODE	4	
J1, J2	VJS3155	CONNECTOR (FEMALE)	2		D19	MA152WK	DIODE	1	
J3, J4	VJS3154	CONNECTOR (FEMALE)	2		D20-24	MA152K	DIODE	5	
J5	VJJ0322	MONITOR JACK	1		D25	MA4300-M	DIODE	1	
					D26	MA166	DIODE	1	
P1	VJP3094	CONNECTOR (MALE)	1		D27	MA4062	DIODE	1	
		MISCELLANEOUS			D28, 29	MA166	DIODE	2	
					DP1	VSL0489	DISPLAY	1	
	VSC4617	RCA SHIELD PLATE	1		F1	EYP2BN135	FUSE	1	
					FL1-L4	VLF1016A470	FILTER	4	
					IC1	HD64180ZRP8	IC	1	
■ E19	VEP80A12B	SUB JACK P.C. BOARD	1	(RTL) FOR AJ-D440P/D440E	IC2	VS12386C	IC	1	
					IC3	K6256DLG7L	IC	1	
J2	VJS3155	CONNECTOR (FEMALE)	1		IC4	TL7705CPSB	IC	1	
J4	VJS3154	CONNECTOR (FEMALE)	1		IC5	74F32SJ	IC	1	
J5	VJJ0322	MONITOR JACK	1		IC6	MC74HC04AF	IC	1	
P1	VJP3094	CONNECTOR (MALE)	1		IC7	MC74HC32AF	IC	1	
		MISCELLANEOUS			IC8	UPD71055GB	IC	1	
	VSC4617	RCA SHIELD PLATE	1		IC9	MC74HC4538AF	IC	1	
					IC10	MC34051M	IC	1	
					IC11	UPD16310GF	IC	1	
					IC12	NUM78L09UA	IC	1	
					IC13	NUM79L09UA	IC	1	
					IC14, 15	NUM4580ED	IC	2	
					IS2	VJS2336A032	CONNECTOR (FEMALE)	1	
■ E20	VEP80A09A	EJECT P.C. BOARD	1	(RTL)	L1	VLP0133	COIL	1	
					P1	VJP1243T	CONNECTOR (MALE) 3P	1	
P5	VJP1243T	CONNECTOR (MALE) 3P	1		P2	VJP3095	CONNECTOR (MALE)	1	
					P3	VJP3088	CONNECTOR (MALE)	1	
SW1	VSP1005	SWITCH	1		P4	VJP3091	CONNECTOR (MALE)	1	
					Q1-Q5	2SD601A-R	TRANSISTOR	5	
					Q6, Q7	2SC1815Y	TRANSISTOR	2	
					Q8	2SC3074Y	TRANSISTOR	1	
					QR1-R3	UN2214	TRANSISTOR-RESISTOR	3	
■ E21	VEP86256A	FRONT CPU P.C. BOARD	1	(RTL) FOR AJ-D450P/D450E	R1	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
					R8-15	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	8	
C1	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		R16	ERJ6GEYG222	M. RESISTOR CH 1/10W 2.2K	1	
C2	ECEV1HV2R2Q	E. CAPACITOR CH 50V 2.2U	1		R17	ERJ6GEY0R00	M. RESISTOR CH 1/10W 0	1	
C3	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	1		R18-25	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	8	
C4, C5	ECUM1H220JCN	C. CAPACITOR CH 50V 22P	2		R26, 27	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
C6	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R28	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
C7-12	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	6		R29, 30	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
C13	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R31	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
C14	ECUM1H104ZFN	C. CAPACITOR CH 50V 0.1U	1		R32, 33	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
C15-17	ECUM1H103KBN	C. CAPACITOR CH 50V 0.01U	3		R34	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
C18	ECEA0JGE471	E. CAPACITOR 6.3V 470U	1		R35, 36	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
C19	ECEV1HV0100	E. CAPACITOR CH 50V 1U	1		R37	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
C20, 21	ECUX1H333KBN	C. CAPACITOR CH 50V 0.033U	2		R38, 39	ERJ6GEYG223	M. RESISTOR CH 1/10W 22K	2	
C22	ECEA1HGE330	E. CAPACITOR 50V 33U	1		R40	ERJ6GEYG221	M. RESISTOR CH 1/10W 220	1	
C23	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	1		R44	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
C24	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		R49, 50	ERJ6GEYF473	M. RESISTOR CH 1/10W 47K	2	
C25, 26	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R51, 52	ERJ6GEYF472	M. RESISTOR CH 1/10W 4.7K	2	
C27	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		R53	ERJ6GEYG101	M. RESISTOR CH 1/10W 100	1	
C28, 29	ECUM1E104ZFN	C. CAPACITOR CH 25V 0.1U	2		R54	ERJ6GEYG103	M. RESISTOR CH 1/10W 10K	1	
C30	ECEV1CV4700	E. CAPACITOR CH 16V 47U	1		R55	ERDS2TJ222	C. RESISTOR 1/4W 2.2K	1	
					R56, 57	ERDS2TJ221	C. RESISTOR 1/4W 220	2	

Ref.No.	Part No.	Part Name & Description	Pcs	Remarks	Ref.No.	Part No.	Part Name & Description	Pcs	Remarks
R58	ERDS2TJ220	C.RESISTOR 1/4W 22	1		FL1-L4	VLF1016A470	FILTER	4	
R59	ERJ8GCVJ103	M.RESISTOR CH 1/8W 10K	1		IC1	HD64180ZRP8	IC	1	
R60, 61	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2		IC2	VSI2386C	IC	1	
R63	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		IC3	K6256DLG7L	IC	1	
R64, 65	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		IC4	TL7705CPSB	IC	1	
R67	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1		IC5	74F32SJ	IC	1	
R68, 69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2		IC6	MC74HC04AF	IC	1	
R72	ERDS2T0	C.RESISTOR 1/4W 0	1		IC7	MC74HC32AF	IC	1	
SW2-W8	VSP1005	SWITCH	7		IC8	UPD71055GB	IC	1	
SW9-16	VSP1031	SWITCH	8		IC9	MC74HC4538AF	IC	1	
SW17, 18	VSS0280	SWITCH	2		IC10	SN75C1168NS	IC	1	
SW19, 20	VSS0346	SWITCH	2		IC11	UPD16310GF	IC	1	
SW21, 22	VSS0280	SWITCH	2		IC12	NJM78L09UA	IC	1	
SW23	VSS0346	SWITCH	1		IC13	NJM79L09UA	IC	1	
TG1	EYF6CU	TEST POINT	1		IS2	VJS2336A032	CONNECTOR (FEMALE)	1	
TR1	VLT0884	TRANSFORMER	1		L1	VLP0133	COIL	1	
VR1, R2	EVUFSAE03A14	V.RESISTOR 10K	2		P1	VJP1243T	CONNECTOR (MALE) 3P	1	
X1	VSX0641	CRYSTAL OSCILLATOR	1		P2	VJP3095	CONNECTOR (MALE)	1	
		MISCELLANEOUS			P3	VJP3088	CONNECTOR (MALE)	1	
					P4	VJP3091	CONNECTOR (MALE)	1	
					Q1-Q5	2SD601A-R	TRANSISTOR	5	
					Q6, Q7	2SC1815Y	TRANSISTOR	2	
					Q8	2SC3074Y	TRANSISTOR	1	
					QRI-R3	UN2214	TRANSISTOR-RESISTOR	3	
■ E21	VEP86256B	FRONT CPU P.C. BOARD	1	(RTL)FOR AJ-D440P/D440E	R1	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
					R8-15	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	8	
C1	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		R16	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
C2	ECEV1HV2R20	E.CAPACITOR CH 50V 2.2U	1		R17	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	1	
C3	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		R18-25	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	8	
C4, C5	ECUM1H220JCN	C.CAPACITOR CH 50V 22P	2		R26, 27	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
C6	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		R28	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C7-12	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	6		R29, 30	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
C13	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		R31	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C14	ECUM1H104ZFN	C.CAPACITOR CH 50V 0.1U	1		R32, 33	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
C15-17	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	3		R34	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C18	ECEA0JGE471	E.CAPACITOR 6.3V 470U	1		R35, 36	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
C19	ECEV1HV0100	E.CAPACITOR CH 50V 1U	1		R37	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C20, 21	ECUX1H333KBN	C.CAPACITOR CH 50V 0.033U	2		R38, 39	ERJ6GEYG223	M.RESISTOR CH 1/10W 22K	2	
C22	ECEA1HGE330	E.CAPACITOR 50V 33U	1		R40	ERJ6GEYG221	M.RESISTOR CH 1/10W 220	1	
C23	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	1		R44	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C24	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		R49, 50	ERJ6GEYF473	M.RESISTOR CH 1/10W 47K	2	
C25, 26	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		R51, 52	ERJ6GEYF472	M.RESISTOR CH 1/10W 4.7K	2	
C27	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		R53	ERJ6GEYG101	M.RESISTOR CH 1/10W 100	1	
C28, 29	ECUM1E104ZFN	C.CAPACITOR CH 25V 0.1U	2		R54	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	1	
C30	ECEV1CV4700	E.CAPACITOR CH 16V 47U	1		R55	ERDS2TJ222	C.RESISTOR 1/4W 2.2K	1	
C31, 32	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		R56, 57	ERDS2TJ221	C.RESISTOR 1/4W 220	2	
C33	ECEV1CN1000	E.CAPACITOR CH 16V 10U	1		R58	ERDS2TJ220	C.RESISTOR 1/4W 22	1	
C34, 35	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	2		R59	ERJ8GCVJ103	M.RESISTOR CH 1/8W 10K	1	
C36	ECEV1CN1000	E.CAPACITOR CH 16V 10U	1		R60, 61	ERJ6GEY0R00	M.RESISTOR CH 1/10W 0	2	
C40	ECUM1H103KBN	C.CAPACITOR CH 50V 0.01U	1		R63	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
D1	LN28RCPP	LED	1		R64, 65	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
D2-D5	LN38GCPP	LED	4		R67	ERJ6GEYG222	M.RESISTOR CH 1/10W 2.2K	1	
D7-14	MA152K	DIODE	8		R68, 69	ERJ6GEYG103	M.RESISTOR CH 1/10W 10K	2	
D15-18	MA152K	DIODE	4		R72	ERDS2T0	C.RESISTOR 1/4W 0	1	
D19	MA152K	DIODE	1		SW2-W8	VSP1005	SWITCH	7	
D20-24	MA152K	DIODE	5		SW9-16	VSP1031	SWITCH	8	
D25	MA4300-M	DIODE	1		SW17, 18	VSS0280	SWITCH	2	
D26	MA166	DIODE	1		SW23	VSS0346	SWITCH	1	
D27	MA4062	DIODE	1		TG1	EYF6CU	TEST POINT	1	
D28, 29	MA166	DIODE	2		TR1	VLT0884	TRANSFORMER	1	
DP1	VSL0489	DISPLAY	1		X1	VSX0641	CRYSTAL OSCILLATOR	1	
F1	EYP2BN135	FUSE	1				MISCELLANEOUS		

AJ-D450/440PE

[illegible]

